Supplementary Appendix

Supplement to:	The burden of	adhesions in	abdominal a	nd pelvic surgery:	a systematic
review					

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Not applicable, only 1 study in analysis

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Not applicable, all studies intermediate quality

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Not applicable. All studies in Lower GI Surgery

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Not applicable, all studies lower GI surgery (appendectomy)

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Appendix A. Full review Protocol (As registered through PROSPERO- CRD42012003180)

PROSPERO International prospective register of systematic reviews

Review title and timescale

1 Review title

Give the working title of the review. This must be in English. Ideally it should state succinctly the interventions or exposures being reviewed and the associated health or social problem being addressed in the review.

The burden of adhesions in abdominal and pelvic surgery: a systematic review

2 Original language title

For reviews in languages other than English, this field should be used to enter the title in the language of the review. This will be displayed together with the English language title.

3 Anticipated or actual start date

Give the date when the systematic review commenced, or is expected to commence.

05/10/2011

4 Anticipated completion date

Give the date by which the review is expected to be completed.

31/01/2013

5 Stage of review at time of this submission

Indicate the stage of progress of the review by ticking the relevant boxes. Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. This field should be updated when any amendments are made to a published record.

The review has not yet started

No

Review stage	Started	Completed
Preliminary searches	No	Yes
Piloting of the study selection process	No	Yes
Formal screening of search results against eligibility criteria	No	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	Yes

Provide any other relevant information about the stage of the review here.

Review team details

6 Named contact

The named contact acts as the guarantor for the accuracy of the information presented in the register record.

Richard ten Broek

7 Named contact email

Enter the electronic mail address of the named contact.

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Enter the full postal address for the named contact.

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9 Named contact phone number

Enter the telephone number for the named contact, including international dialing code.

+31636304310

10 Organisational affiliation of the review

Full title of the organisational affiliations for this review, and website address if available. This field may be completed as 'None' if the review is not affiliated to any organisation.

Dutch Adhesion Group

Website address:

www.adhesies.nl

11 Review team members and their organisational affiliations

Give the title, first name and last name of all members of the team working directly on the review. Give the organisational affiliations of each member of the review team.

Title	First name	Last name	Affiliation		
Dr	Richard	ten Broek	Radboud University Nijmegen Medical Center		
Mr	Yama	Issa	Radboud University Nijmegen Medical Center		
Dr	Evert	van Santbrink	Erasmus Medical Center		
Dr	Nicole	Bouvy	Maastricht University Medical Centre		
Dr	Roy	Kruitwagen	Maastricht University Medical Centre		
Professor	Johannes	Jeekel	Erasmus Medical Center		
Dr	Erica	Bakkum	Onze Lieve Vrouwe Gasthuis Amsterdam		
Dr	Harry	van Goor	Radboud University Nijmegen Medical Center		
Professor	Marouska	Rovers	Radboud University Nijmegen Medical Center		

12 Funding sources/sponsors

Give details of the individuals, organizations, groups or other legal entities who take responsibility for initiating, managing, sponsoring and/or financing the review. Any unique identification numbers assigned to the review by the individuals or bodies listed should be included.

No external funding

13 Conflicts of interest

List any conditions that could lead to actual or perceived undue influence on judgements concerning the main topic investigated in the review.

Are there any actual or potential conflicts of interest?

None known

14 Collaborators

Give the name, affiliation and role of any individuals or organisations who are working on the review but who are not listed as review team members.

Title First name Last name Organisation details

Review methods

15 Review question(s)

State the question(s) to be addressed / review objectives. Please complete a separate box for each question. To systematically review the incidence and morbidity of the four most important complications of postoperative adhesion formation, i.e:

small bowel obstruction

female infertility

difficulties during reoperation

chronic abdominal pain

16 Searches

Give details of the sources to be searched, and any restrictions (e.g. language or publication period). The full search strategy is not required, but may be supplied as a link or attachment.

We will search the Cochrane Central Register of Controlled Trials (CENTRAL), PubMed (1990 till present) and EMBASE (1990 till present). To increase the yield of relevant studies, we will also inspect the reference lists of all identified studies. There will be no language or publication restrictions. Over the last decades the introduction of new surgical techniques, protocols and standards has changed the indications and performance of surgery dramatically (e.g. the introduction of laparoscopy, percutaneous techniques, TME resection as the standard treatment in rectum carcinomas etc.). Although the cut-off point of 1990 is somewhat arbitrary, some date restriction is necessary to give representative numbers for contemporary surgery. We will perform a sensitivity analysis to study the influence of time by comparing the timeframe 1990-2000 and 2000- present (see below).

17 URL to search strategy

If you have one, give the link to your search strategy here. Alternatively you can e-mail this to PROSPERO and we will store and link to it.

18 Condition or domain being studied

Give a short description of the disease, condition or healthcare domain being studied. This could include health and wellbeing outcomes.

Small bowel obstruction, female inferitlity, inadvertent enterotomy, operative time, chronic abdominal pain.

19 Participants/population

Give summary criteria for the participants or populations being studied by the review. The preferred format includes details of both inclusion and exclusion criteria.

Patients with any peritoneal surgery in history.

20 Intervention(s), exposure(s)

Give full and clear descriptions of the nature of the interventions or the exposures to be reviewed Any type of general, vascular, gynecological or urological surgery performed via laparotomy or laparoscopy.

21 Comparator(s)/control

Where relevant, give details of the alternatives against which the main subject/topic of the review will be compared (e.g. another intervention or a non-exposed control group).

Not applicable.

22 Types of study to be included initially

Give details of the study designs to be included in the review. If there are no restrictions on the types of study design eligible for inclusion, this should be stated.

Inclusion criteria: Different types of studies were considered if the incidence of adhesion related complications could be extracted for the cohort of patients with peritoneal surgery in history. Case series were considered if consecutive and a cohort of at least 10 patients was included. Exclusion criteria: Multiple publications of the same cohort with no new information on predefined outcomes. No transperitoneal surgery (i.e. preperitoneal or retroperitoneal surgery)

23 Context

Give summary details of the setting and other relevant characteristics which help define the inclusion or exclusion criteria.

24 Primary outcome(s)

Give the most important outcomes.

Incidence of adhesive small bowel obstruction.

Give information on timing and effect measures, as appropriate.

Up to 10 years after peritoneal surgery

25 Secondary outcomes

List any additional outcomes that will be addressed. If there are no secondary outcomes enter None.

Incidence of inadvertent enterotomy. Pregnancy rate following surgery. Incidence of chronic visceral pain. Incidence of any episode of small bowel obstruction. Incidence of adhesions found in patients with small bowel obstruction. Reoperations for adhesive small bowel obstruction. Length of hospital stay for episodes of adhesive small bowel obstruction. In-hospital mortality from adhesive small bowel obstruction. Difference in operative time between patients with or with no prior surgery in history. Utilization of fertility treatment for pregnancy. Incidence of adhesions in patients evaluated for postoperative acquired female inferteility Adhesions found during reoperation for chronic abdominal pain.

Give information on timing and effect measures, as appropriate.

Most outcomes up to 10 years after surgery. For outcomes "incidence of enterotomy" and "difference in operative time", timeframe is during a subsequent peritoneal operation. Fertility related outcomes are lifelong in the period after an abdominal operation.

26 Data extraction, (selection and coding)

Give the procedure for selecting studies for the review and extracting data, including the number of researchers involved and how discrepancies will be resolved. List the data to be extracted.

At least two reviewers will extract data on study design, characteristics, number of participants, and outcomes reported. An electronic data extraction sheet has been developed comprising quality scores and outcome data. Discrepancies will be resolved through discussion.

27 Risk of bias (quality) assessment

State whether and how risk of bias will be assessed, how the quality of individual studies will be assessed, and whether and how this will influence the planned synthesis.

Two reviewers will independently assess the methodological quality. The methodological quality of the included studies will be scored according to a revised version of the Newcastle-Ottowa Scale: Selection of cohort representativeness of cohort: rated one star if unselected surgical cohort or, within subgroups, a common operation type of operation using conventional techniques is performed. outcome was not present at start of study: rated one star if study demonstrated that outcome of interest was not already present at start of study. outcome assessment (blinding of outcome assessor, adequate time to follow-up for condition to -assessment method: rated one star if diagnosis was confirmed through a blinded outcome assessor or secure records (e.g. surgical records) Adequate time to follow up: rated one star, for longitudinal assessment of small bowel obstruction, fertility and chronic pain a follow-up of at least one year between operation and assessment. Longterm follow-up is not required for other outcomes. Follow-up methods Rated one star if percentage loss to follow-up is at maximum 10% and reasons for loss adequately described. Maximum score is 5 stars. 5 stars is considered high quality. 3 to 4 stars is considered intermediate quality and 1-2 stars low quality. Sensitivity analysis will be performed using this quality scoring.

28 Strategy for data synthesis

Give the planned general approach to be used, for example whether the data to be used will be aggregate or at the level of individual participants, and whether a quantitative or narrative (descriptive) synthesis is planned. Where appropriate a brief outline of analytic approach should be given.

Assessment of heterogeneity: Since large heterogeneity is to be expected we will first assess the clinical heterogeneity of the studies. Based on this clinical heterogeneity we defined some a priori subgroups based on the anatomical location, i.e. general surgery (unselected mixture of different operations), Upper GI, Lower GI, Hepato-biliairy and pancreatic surgery, abdominal wall surgery, gynecological surgery, urological and pediatric surgery. Furthermore, since minimal invasive techniques are often considered to be correlated with less adhesion related complication, we will also perform a subgroup analyses comparing laparoscopic vs. open surgery. However, from a societal perspective the overall incidence of adhesion related complications after any type of surgery might also be important, e.g. for policy makers. We will therefore also pool all studies. To adjust for some heterogeneity between studies we will use a random effects model. As recommended in the Cochrane handbook, heterogeneity was measured using I2 tests. An I2 value between 50 and 75% was defined as substantial heterogeneity and an I2= 75% was defined as considerable heterogeneity. Dealing with missing data: We will try to contact the authors to provide additional information in case of missing data. In primary analyses, we will only analyse the available data, but we will also explore the impact of incomplete data reporting on the validity of our results by performing scenario analyses (best and worst-case scenario). Best-case and worst-case scenarios will be made for the outcomes: •

Incidence of adhesive small bowel obstruction • Incidence of inadvertent enterotomy • Pregnancy rate following surgery • Incidence of chronic visceral pain • Incidence of any episode of small bowel obstruction • Reoperations for adhesive small bowel obstruction In the best-case scenario analyses we assume a lower incidence of adhesion related complications. i.e. all dropouts do not have an adhesion related outcome and all dropouts have become pregnant. In contrast, in the worst-case scenario analyses a higher incidence of adhesion related outcomes is assumed, i.e. all dropouts have the adhesion related outcome and none became pregnant. Data analyses: The inverse variance method will be used for pooling incidences and presented as proportion (p) with 95% confidence intervals (CI). Assessment of reporting biases: We will assess reporting biases using funnel plots.

29 Analysis of subgroups or subsets

Give any planned exploration of subgroups or subsets within the review. 'None planned' is a valid response if no subgroup analyses are planned.

We plan to perform the following subgroup analyses: • Subgroups according to anatomical location: general surgery (unselected mixture of different operations), upper gastro-intestinal tract lower gastro-intestinal tract hepato-biliairy and pancreatic surgery abdominal wall surgery gynecological surgery urological surgery pediatric surgery • Minimal invasive vs. open technique laparotomy laparoscopy We will perform sensitivity analyses to study the robustness of the results in four stages: 1) We will test whether the impact of a single study was strong enough to significantly affect the pooled estimate. This sensitivity assessment was performed excluding each individual study in turn, repeating the analysis systematically and then comparing the resulting pooled estimate and 95% confidence interval, with the estimate and interval obtained including all the studies. A change in the pooled estimate of more than 10% or in the confidence interval of more than 25% was considered significant and reported. 2) We will compare the effects according to the methodological quality of the study, i.e. high, intermediate or low quality. 3) We will compare the pooled outcome of prospective cohorts with those of the retrospective cohorts. 4) We will compare studies between 1990- 2000 with those published as from 2000 until present.

Review general information

30 Type of review

Select the type of review from the drop down list.

Other

31 Language

Select the language(s) in which the review is being written and will be made available, from the drop down list. Use the control key to select more than one language.

English

Will a summary/abstract be made available in English?

Yes

32 Country

Select the country in which the review is being carried out from the drop down list. For multi-national collaborations select all the countries involved. Use the control key to select more than one country.

Netherlands

33 Other registration details

List places where the systematic review title or protocol is registered (such as with he Campbell Collaboration, or The Joanna Briggs Institute). The name of the organisation and any unique identification number assigned to the review by that organization should be included.

34 Reference and/or URL for published protocol

Give the citation for the published protocol, if there is one.

Give the link to the published protocol, if there is one. This may be to an external site or to a protocol deposited with CRD in pdf format.

35 Dissemination plans

Give brief details of plans for communicating essential messages from the review to the appropriate audiences.

Do you intend to publish the review on completion?

Yes

36 Keywords

Give words or phrases that best describe the review. (One word per box, create a new box for each term)

Adhesions

Incidence

burden of disease

small bowel obstruction

complications

surgery

laparotomy

laparotoscopy

enterotomy

37 Details of any existing review of the same topic by the same authors

Give details of earlier versions of the systematic review if an update of an existing review is being registered, including full bibliographic reference if possible.

38 Current review status

Review status should be updated when the review is completed and when it is published.

Completed but not published

30/04/2013

Appendix B. Full reference to included studies and unretrieved studies

References to included studies:

- (1) Abasbassi M, Pottel H, Deylgat B, Vansteenkiste F, Van RF, Devriendt D et al. Small Bowel Obstruction After Antecolic Antegastric Laparoscopic Roux-en-Y Gastric Bypass Without Division of Small Bowel Mesentery: A Single-Centre, 7-Year Review. Obes Surg 2011.
- (2) Aberg H, Pahlman L, Karlbom U. Small-bowel obstruction after restorative proctocolectomy in patients with ulcerative colitis. Int J Colorectal Dis 2007; 22(6):637-642.
- (3) Abol-Enein H, Ghoneim MA. Functional results of orthotopic ileal neobladder with serous-lined extramural ureteral reimplantation: experience with 450 patients. J Urol 2001; 165(5):1427-1432.
- (4) Adachi W, Koike S, Rafique M, Kajikawa S, Kaneko G, Kuroda T et al. Preoperative intraperitoneal chemotherapy for gastric cancer, with special reference to delayed peritoneal complications. Surg Today 1995; 25(5):396-403.
- (5) Ahlberg G, Bergdahl S, Rutqvist J, Soderquist C, Frenckner B. Mechanical small-bowel obstruction after conventional appendectomy in children. Eur J Pediatr Surg 1997; 7(1):13-15.
- (6) Akgur FM, Tanyel FC, Buyukpamukcu N, Hicsonmez A. Adhesive small bowel obstruction in children: the place and predictors of success for conservative treatment. J Pediatr Surg 1991; 26(1):37-41.
- (7) Alexakis N, Ghaneh P, Connor S, Raraty M, Sutton R, Neoptolemos JP. Duodenum- and spleen-preserving total pancreatectomy for end-stage chronic pancreatitis. Br J Surg 2003; 90(11):1401-1408.
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Appendix C. General study Characteristics and results from risk of bias assessment

Study	Design	Population	Operation	Technique	SBO	Difficulties at reoperation	Infertility	Pain	Selection of cohort	Outcome assessment
Abasbassi 2011	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0		**
Aberg 2007	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0	**	***
Abol-Enein 2001	retrospective	Adult	Urology	Laparotomy	1	0	0	0	*	**
Adachi 1995	retrospective	Adult	Upper GI	Laparotomy	1	0	0	0		***
Ahlberg 1997	retrospective	Paediatric	Appendectomy	Laparotomy	1	0	0	0	*	**
Akgur 1991	retrospective	Paediatric	General Surgery	NA	1	1	0	0	**	***
Alexakis 2003	prospective	Adult	Hepato-biliary pancreatic	Laparotomy	1	0	0	0	*	***
Alwan 1999	retrospective	Adult	Colorectal	NA	1	1	0	0	*	***
Ambiru 2008	•			Mixed, no	1	0	0	0	*	***
Aminsharifi 2011	retrospective	Adult	General Surgery	subgroups	0	0			*	***
Amos 1996	retrospective	Adult	Urology	Laparoscopy	0	1	0	0	*	***
Arnold 2010	retrospective	Adult	Colorectal	NA	1	0	0	0	*	***
Atiq 1993	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0		***
	prospective	Adult	Upper GI	Laparotomy	1	0	0	0	**	***
Baccari 2009	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0	*	***
Baghai 2009	prospective	Adult	Abdominal Wall	Laparoscopy Mixed,	0	1	0	0		
Bartels 2012	retrospective	Adult	Colorectal	subgroups	1	0	0	0	*	***
Beck 1999	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Becmeur 1998	retrospective	Paediatric	General Surgery	Laparoscopy	1	1	0	0	*	***
Ben-Haim 2002	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0	**	***
Beyrout 2006	retrospective	Adult	General Surgery	NA	1	0	0	0	*	***
Bissada 2004	retrospective	Adult	Urology	Laparotomy	1	0	0	0	*	**
Blachar 2001	retrospective	Adult	Hepato-biliary pancreatic	Laparotomy	1	0	0	0		***
Blachar 2002	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	*
Bojahr 1995	retrospective	Adult	General Surgery	Mixed, no subgroups	0	0	0	1	**	***
Boone 2012	retrospective	Adult	Colorectal	NA	0	1	0	0	*	***
Borzellino 2004	retrospective	Adult	General Surgery	Laparoscopy	1	1	0	0		***
Bouasker 2010	retrospective	Adult	Laparoscopic	1	0	1	0	0	**	***
Boukerrou 2001	•		Cholecystectomy	Laparoscopy		1			**	***
Bringman 2005	retrospective	Adult	Gynaecology Laparscopic Inguinal	Laparoscopy	0	1	0	0	*	***
Burcos 2002	retrospective	Adult	Hernia repair	Laparoscopy	0	0	0	0	**	***
Cabot 2010	retrospective	Adult	General Surgery	Laparotomy	0	1	0	0	*	***
Capella 2006	prospective	Adult	Colorectal Laparoscopic Roux-	Laparoscopy	1	0	0	0	*	***
	retrospective	Adult	en-Y Gastric Bypass	Laparoscopy	1	0	0	0	**	***
Catena 2012	prospective	Adult	General Surgery Laparoscopic Roux-	Laparotomy	1	0	0	0	*	**
Champion 2003	retrospective	Adult	en-Y Gastric Bypass	Laparoscopy Mixed,	1	0	0	0	*	
Chang 2012	retrospective	Paediatric	Colorectal	subgroups	1	0	0	0		***
Chen 1999	retrospective	Adult	General Surgery	NA	1	0	0	0	*	***
Chin 2007	prospective	Adult	Urology	Laparoscopy	1	0	0	0		**
Cho 2006	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	*

				Mixed,					ale ale	ale ale ale
Chopra 2003	retrospective	Adult	General Surgery	subgroups	1	1	0	0	**	***
Chou 2005	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Choudhry 2006	retrospective	Paediatric	General Surgery	Laparotomy	1	0	0	0	**	***
Coleman 2000	prospective	Adult	General Surgery	Laparotomy	0	1	0	0	**	***
Coran 1990	retrospective	Adult and Paediatric	Colorectal	Laparotomy	1	0	0	0	*	***
Counihan 1994	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0	*	*
Cox 1993	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Cox 1993a	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Dadan 1996	retrospective	Adult	Rectum prolaps	Laparotomy	1	0	0	0		***
Dasmahapatra 1991	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0		***
Duron 2000	retrospective	Adult	General Surgery	Mixed, no subgroups	1	0	0	0	*	***
Duron 2008	prospective	Adult	<u> </u>		1	0	0	0	*	***
Edna 1998			General Surgery	Laparoscopy	1				*	***
El-Gohary 2010	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0		***
Els 1993	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0		***
Ercan 2009	retrospective	Adult	Colorectal Laparoscopic	Laparotomy	1	0	0	0	**	***
Escobar 2004	prospective	Adult	Cholecystectomy	Laparoscopy	0	1	0	0		***
	retrospective	Paediatric	Upper GI	Laparotomy Mixed,	1	0	0	0	*	***
Eshuis 2010	prospective	Adult	Colorectal	subgroups	1	0	0	0	1	***
Fan 2001	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0	ale ale	
Fazio 2006	prospective	Adult	Colorectal	Laparotomy	1	0	0	0	**	***
Ferrari 2008	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0	*	***
Fevang 2004	retrospective	Adult	General Surgery	NA	0	1	0	1	**	***
Finan 1997	retrospective	Adult	Gynaecology	Laparotomy	0	1	0	0	*	***
Finnell 2007	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	0	0	0	0	**	**
François 1994	retrospective	Adult	General Surgery	Laparoscopy	0	1	0	0	**	***
Freys 1994	prospective	Adult	General Surgery	Laparoscopy	0	1	0	0	**	***
Fuchs 1992	retrospective	Adult	Laparoscopic Cholecystectomy	Laparoscopy	0	1	0	0	**	***
Gorgun 2004	retrospective	Adult	Colorectal	NA	0	0	1	0		*
Grant 2008	retrospective	Paediatric	General Surgery	Laparotomy	1	0	0	0	**	***
Gunabushanam 2009	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	*
Guru 2010	retrospective	Adult	Other Lower GI	Laparoscopy	1	0	0	0		**
На 2008	retrospective	Paediatric	Other Lower GI	Laparotomy	1	0	0	0	*	***
Hahnloser 2004	•	Adult	Colorectal		0	0	1	0		*
Hamel 2000	prospective			Laparotomy	0	1			**	***
Hashimoto 2012	prospective	Adult	Colorectal	Laparoscopy	0	1	0	0	**	*
Hayashi 2008	prospective	Adult	General Surgery	Laparotomy	1	0	0	0	**	***
Hernandez-Richter	prospective	Adult	Upper GI Laparscopic Inguinal	Laparotomy	1	0	0	0		*
1999 Howard 2000	retrospective	Adult	Hernia repair	Laparoscopy Mixed, no	1	0	0	0	*	***
Howard 2000	prospective	Adult	Gynaecology	subgroups	0	0	0	1	*	*
Hudson 1997	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0	*	***
Husain 2001	retrospective	Adult	Gynaecology	Laparoscopy	0	1	0	0	T	イイイ

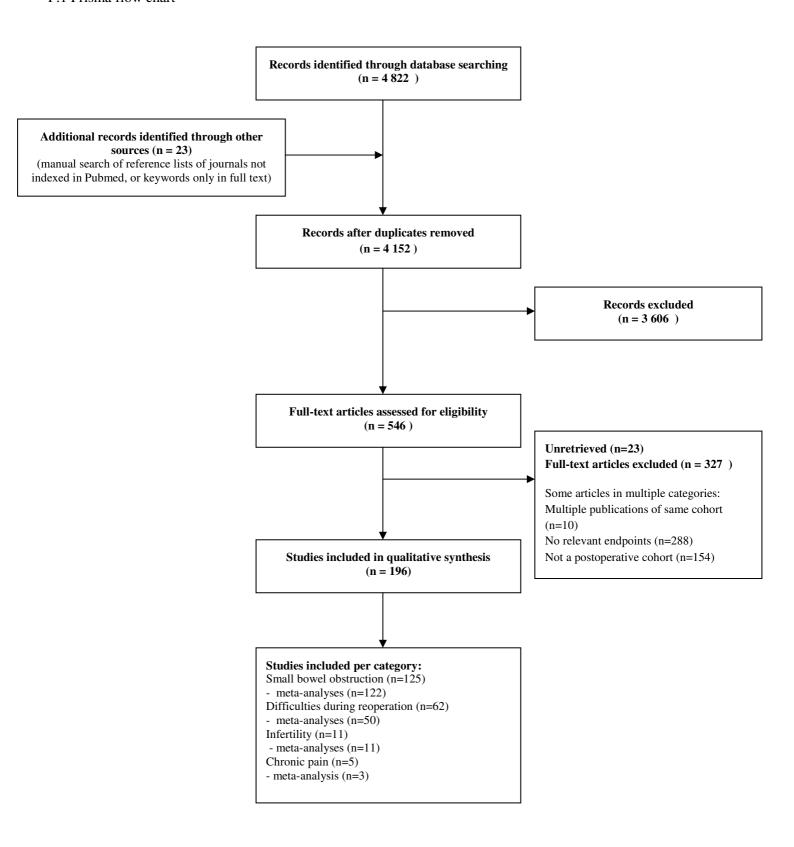
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Husain 2007	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	***
Hwang 2004	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	**
Inoue 2005	prospective	Paediatric	General Surgery	Laparotomy	0	1	0	0	**	***
Jeong 2008	retrospective	Adult	Colorectal	Mixed, no subgroups	1	0	0	0	*	***
Johanet 1999	retrospective	Adult	General Surgery	Laparotomy	1	1	0	0	*	***
Johnson 2004		Adult	Colorectal		0	0		0	*	*
Karayiannakis 2004	retrospective		Laparoscopic	Laparotomy			1		**	***
Kawamura 2009	retrospective	Adult	Cholecystectomy		0	1	0	0	**	***
Kawamura 2010	retrospective		Other Lower GI	Laparotomy	1	0	0	0		***
Keck 1994	retrospective	Adult	Upper GI	Laparotomy	0	1	0	0	**	***
	retrospective	Adult	Colorectal	Laparotomy	0	1	0	0		***
Kehoe 2009	retrospective	Adult	Gynaecology	Laparotomy Mixed, no	1	0	0	0	*	***
Khaikin 2007	retrospective	Adult	General Surgery	subgroups	1	0	0	0	*	
Khaitan 2003	retrospective	Adult	General Surgery	Laparoscopy	1	0	0	0		***
Kirshtein 2002	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0		***
Klausner 1995	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0		***
Kolmorgen 1998	retrospective	Adult	Gynaecology	Laparoscopy	0	1	0	0	**	***
Komori 1997	retrospective	Adult	Aorta Surgery	Laparotomy	0	1	0	0	*	***
Kumakiri 2010	prospective	Adult	Colorectal	Laparotomy	0	1	0	0	*	***
Kurian 2010	retrospective	Adult	General Surgery	NA	1	0	0	0	**	**
Kusunoki 2005	•				0	1			**	***
Kwok 2004	retrospective	Adult	Gynaecology	Laparoscopy			0	0	**	***
Kyzer 1999	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0	**	***
Kössi 2004	prospective	Adult	Colorectal	Laparotomy	0	1	0	0	**	***
	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0	**	***
Kössi 2009	prospective	Adult	Colorectal	Laparoscopy	0	1	0	0	**	***
LeBlanc 2003	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0		
Lee 2012 Lehmann-	prospective	Adult	Colorectal	NA	1	0	0	0	*	**
Willenbrock 1990	retrospective	Adult	Appendectomy	NA	0	0	1	1	*	***
Lepisto 2007	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0		*
Leung 2009	retrospective	Adult	Appendectomy	Mixed, no subgroups	1	0	0	0	*	***
Lin 1995	retrospective	Paediatric	Other Lower GI	Laparotomy	1	0	0	0		***
Lo 2007	retrospective	Adult	General Surgery	NA	1	0	0	0	*	***
Lumley 2002	prospective	Adult	Colorectal	Laparoscopy	1	0	0	0	*	***
MacLean 2002	retrospective	Adult	Colorectal	NA	1	0	0	0		***
Mais 1998	•		General Surgery		1	0		0	*	***
Majewski 2005	retrospective	Adult	,	Mixed,	1		0		*	*
Matter 1997	prospective	Adult	General Surgery	subgroups	1	0	0	0	*	***
Mendez-Gallart	retrospective	Adult	General Surgery	NA Mixed, no	1	0	0	0		***
2011 Manaias 1000	retrospective	Paediatric	Other Lower GI	subgroups	1	0	0	0	*	**
Menzies 1990	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Menzies 2001	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0		
Miller 2000	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***

Miller 2002									*	***
	retrospective	Adult	General Surgery Laparoscopic Roux-	Laparotomy	1	0	0	0	•	***
Miyashiro 2010	retrospective	Adult	en-Y Gastric Bypass	Laparoscopy	1	0	0	0		
Montz 1994	retrospective	Adult	Gynaecology	Laparotomy	1	0	0	0		***
Morales 2007	retrospective	Adult	Caesarean section	Laparotomy	0	1	0	0	**	***
Mortier 2006	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0	**	**
Muffly 2012	retrospective	Adult	Gynaecology	Mixed, subgroups	1	0	0	0	**	***
Murphy 2006	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0		***
Naguib 2012	prospective	Adult	Colorectal	Laparoscopy	0	1	0	0	**	***
Nazemi 2006	retrospective	Adult	Urology	Laparoscopy	0	1	0	0		***
Nelson 2006	•	Adult	Roux-en-Y Gastric	Mixed, subgroups	1	0	0	0	*	***
Ng 2009	prospective		Bypass	Mixed,	1				*	***
Nieuwenhuijzen	prospective	Adult	Colorectal	subgroups	1	0	0	0	*	***
1998 Nour 1996	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0		***
	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0	**	***
Nozaki 2008	retrospective	Adult	Colorectal	Laparoscopy	0	1	0	0		
Oliveira 1997	retrospective	Adult	Other Lower GI	Laparoscopy	0	1	0	0	**	***
Olsen 2002	retrospective	Adult	Other Lower GI	Laparotomy	1	0	0	0		**
Olver 1990	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0	*	*
Oresland 1994	retrospective	Adult	Colorectal	Laparotomy	0	0	1	0	*	
Pace 2002	prospective	Adult	Colorectal	Laparoscopy	1	0	0	0		***
Parakh 2007	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0		*
Parent 1995	retrospective	Adult	General Surgery	Laparoscopy	1	1	0	0	*	***
Parikh 2008	retrospective	Adult	Colorectal	NA	1	0	0	0	**	***
Parsons 2002	retrospective	Adult			0	1	0	0	*	***
Perrone 2005	•		Urology	Laparoscopy		1			**	***
Petersen 2009	retrospective	Adult	Abdominal Wall	Laparoscopy		1	0	0	*	***
Petros 2011	prospective	Adult	Colorectal	Laparoscopy	0	1	0	0	*	***
	prospective	Adult	Urology Laparoscopic Roux-	Laparoscopy	0	1	0	0	*	***
Pitt 2008	retrospective	Adult	en-Y Gastric Bypass	Laparoscopy	0	0	0	1		***
Pohl 2008	retrospective	Adult	Urology	Laparoscopy	0	1	0	0		
Ragni 1996	retrospective	Adult	Colorectal	Laparotomy Mixed, no	1	0	0	0		*
Rempen 1995	retrospective	Adult	Gynaecology	subgroups	1	0	0	0		*
Ritchey 1993	retrospective	Paediatric	Urology	Laparotomy	1	0	0	0		***
Rogula 2007	retrospective	Adult	Laparoscopic Roux- en-Y Gastric Bypass	Laparoscopy	1	0	0	0	*	***
Rosen 2009	retrospective	Adult	Abdominal Wall	Mixed, no subgroups	1	0	0	0		***
Rosin 2000	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Rosin 2007	prospective	Adult	Colorectal	Laparoscopy	1	0	0	0	*	***
Ryan 2004					1		0		*	*
Sai 2007	retrospective	Adult	Colorectal	NA	1	0		0		*
Saklani 2012	retrospective	Paediatric	Other Lower GI	Laparoscopy Mixed,	1	0	0	0	**	***
Salum 2001	retrospective	Adult	Colorectal	subgroups	1	0	0	0	*	***
	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0	•	***
Sato 2001	retrospective	Adult	General Surgery	Laparoscopy	0	1	0	0		-111-

Scholin 2011	retrospective	Adult	Colorectal	Mixed, subgroups	1	0	0	0	*	**
Seki 2007	retrospective	Adult	Colorectal	Laparoscopy	0	1	0	0		***
Seror 1993	retrospective	Adult	General Surgery	NA	1	0	0	0	*	***
Shayani 2002	retrospective	Adult	Other Lower GI	Laparoscopy	0	1	0	0	*	***
Shieh 1995	retrospective	Paediatric	General Surgery	Laparotomy	1	0	0	0	*	***
Shih 2003	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	***
Shikata 1990	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0	*	**
Siddiqui 2010	prospective	Adult	Urology		0	1	0	0	*	***
Sileri 2008	prospective	Adult	Colorectal	Laparotomy	1	0	0	0	*	***
Sosa 1993	retrospective	Adult	General Surgery	NA	1	0	0	0	*	***
Sowande 2011	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0		**
Stanton 2010	retrospective	Paediatric	Upper GI	Mixed, subgroups	1	0	0	0		***
Suzuki 2003	retrospective	Adult	General Surgery	Laparotomy	1	0	0	0		***
Talwar 1997	prospective	Adult	Other Lower GI	Laparotomy	1	0	0	0		*
Tang 2003	prospective	Adult	Other Lower GI		0	1	0	0	*	***
Tashjian 2007	retrospective	Paediatric	Other Lower GI	Laparotomy	1	0	0	0		***
Taylor 2006		Adult		Laparotomy		0	0	0		***
Taylor 2010	retrospective		Upper GI	Mixed,	1			0	*	**
Ten Broek 2012	retrospective	Adult	Colorectal	subgroups Mixed,	1	0	0		**	***
Tjandra 2008	prospective	Adult	General Surgery	subgroups	0	1	0	0	**	***
Tsao 2007	prospective	Adult	Other Lower GI	Laparotomy Mixed,	0	0	0	0	*	***
Unger 2000	retrospective	Paediatric	Appendectomy Laparoscopic	subgroups	1	0	0	0	*	***
Van Der Krabben	retrospective	Adult	Cholecystectomy	NA	0	1	0	0	**	***
2000 van Eijck 2008	retrospective	Adult	Other Lower GI	Laparotomy	0	1	0	0	*	***
Varkarakis 2007	retrospective	Paediatric	Abdominal Wall	Laparotomy	1	0	0	0		***
Varnell 2008	retrospective	Adult	Urology	NA	1	0	0	0		***
Veselyi 1997	retrospective	Adult	Abdominal Wall	Laparoscopy	0	1	0	0		***
Vignali 2007	retrospective	Paediatric	Appendectomy	NA	1	0	0	0	**	***
Wakhlu 2000	retrospective	Adult	Colorectal	Laparoscopy	0	1	0	0		**
Wakhlu 2009	retrospective	Paediatric	Abdominal Wall	Laparotomy	1	0	0	0		***
Wang 1999	retrospective	Paediatric	Colorectal	Laparotomy	1	0	0	0		***
Wang 2005	retrospective	Paediatric	Urology	Laparotomy	1	0	0	0		**
Wang 2009	retrospective	Adult	Colorectal	Laparotomy	1	0	0	0		***
Wikland 1990	retrospective	Adult	Other Lower GI	Laparoscopy	1	0	0	0	*	**
Yamataka 1997	retrospective	Adult and	Colorectal Hepato-biliary	Laparotomy	0	0	1	0	-	**
Yu 1994	retrospective	Paediatric	pancreatic Laparoscopic	NA	1	0	0	0	*	***
	retrospective	Adult	Cholecystectomy	Laparoscopy	0	1	0	0	*	***
Yuh 2009	retrospective	Adult	Urology Appendectomy and	Laparoscopy	0	1	0	0	**	**
Zbar 1993	retrospective	Adult	Cholecystectomy	Laparotomy	1	0	0	0	11-11	** - *-

Appendix D. Full results of systematic review and meta-analysis

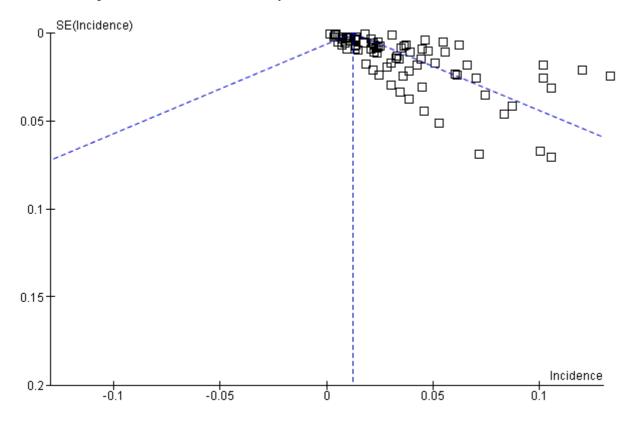
P.1 Prisma flow chart



1.1.1. Forest plot of the incidence of ASBO, including all studies

Study or Subgroup	Incidence	SE	N Total	ASBO Total	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
Abasbassi 2011		0.00567679	652	14	1.8%	0.0215 [0.0103, 0.0326]	-
Aberg 2007		0.02476436	188	25	0.4%	0.1330 [0.0844, 0.1815]	-
Abol-Enein 2001	0.00840336		238	2	1.7%	0.0084 [-0.0032, 0.0200]	
Adachi 1995 Ahlberg 1997		0.09931135 0.00435544	23 721	8 10	0.0% 1.9%	0.3478 [0.1532, 0.5425] 0.0139 [0.0053, 0.0224]	
Anberg 1997 Alexakis 2003		0.00435544	19	1	0.1%	0.0526 [-0.0478, 0.1530]	
Amos 1996		0.03122762	78	3	0.5%	0.0385 [-0.0042, 0.0811]	
Arnold 2010		0.02374868	100	6	0.4%	0.0600 [0.0135, 0.1065]	
Atiq 1993	0.2	0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	
Bartels 2012	0.04761905	0.01066128	399	19	1.2%	0.0476 [0.0267, 0.0685]	
Beck 1999	0.03040398		18912	575	2.2%	0.0304 [0.0280, 0.0329]	-
Bissada 2004	0.03448276		29	1	0.2%	0.0345 [-0.0319, 0.1009]	
Blachar 2002	0.01727862		463	8	1.7%	0.0173 [0.0054, 0.0291]	
Cabot 2010 Capella 2006	0.00754717	0.00375932	530 697	4 26	2.0% 1.6%	0.0075 [0.0002, 0.0149] 0.0373 [0.0232, 0.0514]	ļ <u> </u>
Catena 2000 Catena 2012		0.00717792	181	4	1.0%	0.0373 [0.0232, 0.0314]	
Champion 2003	0.00335008	0.0023649	597	2		0.0034 [-0.0013, 0.0080]	
Chang 2012		0.06708204	20	2		0.1000 [-0.0315, 0.2315]	
Chin 2007	0.00518135		193	1		0.0052 [-0.0049, 0.0153]	 -
Cho 2006	0.00357143	0.00159434	1400	5	2.1%	0.0036 [0.0004, 0.0067]	-
Choudhry 2006	0.05555556	0.01125775	414	23	1.2%	0.0556 [0.0335, 0.0776]	
Coran 1990	0.07	0.0255147	100	7	0.4%	0.0700 [0.0200, 0.1200]	-
Dadan 1996		0.02409097	41	1	0.4%	0.0244 [-0.0228, 0.0716]	
Dasmahapatra 1991		0.03072065	45	2	0.3%	0.0444 [-0.0158, 0.1047]	
Edna 1998	0.04449153		472	21	1.3%	0.0445 [0.0259, 0.0631]	
El-Gohary 2010	0.04237288		118	5 8	0.6%	0.0424 [0.0060, 0.0787] 0.0442 [0.0143, 0.0741]	
Els 1993 Escobar 2004		0.01527743 0.01169343	181 169	4	0.8% 1.1%	0.0442 [0.0143, 0.0741]	
shuis 2010		0.01109343	55	1		0.0182 [-0.0171, 0.0535]	
an 2001		0.06883029	14	1	0.7%	0.0714 [-0.0635, 0.2063]	
azio 2006		0.00344203	1701	35	2.0%	0.0206 [0.0138, 0.0273]	-
Frant 2008		0.00259385	1581	17	2.1%	0.0108 [0.0057, 0.0158]	-
Gunabushanam 2009		0.00394576	835	11	2.0%	0.0132 [0.0054, 0.0209]	-
3uru 2010		0.03771464	26	1	0.2%	0.0385 [-0.0355, 0.1124]	-
Ha 2008	0.10526316	0.0704059	19	2		0.1053 [-0.0327, 0.2433]	
Hayashi 2008		0.00692029	144	1		0.0069 [-0.0066, 0.0205]	-
Hernandez-Richter 1999	0.00413223		726	3		0.0041 [-0.0005, 0.0088]	<u></u>
Hwang 2004	0.01020408		1372	14	2.1%	0.0102 [0.0049, 0.0155]	- _
Jeong 2008		0.00412017	2586	119	1.9%	0.0460 [0.0379, 0.0541]	
(awamura 2009 (ehoe 2009		0.01839535 0.01106099	182 307	12 12	0.6% 1.2%	0.0659 [0.0299, 0.1020] 0.0391 [0.0174, 0.0608]	
_ee 2012	0.01097804		1002	11	2.0%	0.0110 [0.0045, 0.0174]	_
_eung 2009	0.01125492		1777	20	2.1%	0.0113 [0.0064, 0.0162]	-
_in 1995	0.07407407		54	4	0.2%	0.0741 [0.0042, 0.1439]	
_umley 2002	0.03246753	0.01428226	154	5	0.9%	0.0325 [0.0045, 0.0605]	
MacLean 2002	0.06192237	0.00732706	1082	67	1.6%	0.0619 [0.0476, 0.0763]	
Mais 1998		0.03148648	95	10	0.3%	0.1053 [0.0436, 0.1670]	
Majewski 2005		0.01755047	157	8	0.7%	0.0510 [0.0166, 0.0854]	
Menzies 1990		0.00264728	1913	26	2.1%	0.0136 [0.0084, 0.0188]	_
Miyashiro 2010		0.00332354	847	8	2.0%	0.0094 [0.0029, 0.0160]	
Montz 1994 Muffly 2012	0.00122449	0.02421756 0.0006728	98 3321	6 5	0.4% 2.2%	0.0612 [0.0138, 0.1087] 0.0015 [0.0002, 0.0028]	
Murphy 2006		0.04154492	46	4	0.2%	0.0870 [0.0055, 0.1684]	
Nelson 2006		0.00335958	784	7	2.0%	0.0089 [0.0023, 0.0155]	_
Ng 2009		0.01485116	148	5	0.9%	0.0338 [0.0047, 0.0629]	
Nieuwenhuijzen 1998		0.02121724	234	28	0.5%	0.1197 [0.0781, 0.1612]	
Nour 1996		0.02570137	138	14	0.4%	0.1014 [0.0511, 0.1518]	
Pace 2002	0.15384615	0.10006825	13	2	0.0%	0.1538 [-0.0423, 0.3500]	-
Parakh 2007		0.00684882	290	4	1.6%	0.0138 [0.0004, 0.0272]	
Parikh 2008		0.00061552	46798	845	2.2%	0.0181 [0.0168, 0.0193]	•
Ragni 1996		0.02150154	46	1		0.0217 [-0.0204, 0.0639]	
Rempen 1995		0.00956905	104	104	1.3%	0.0096 [-0.0091, 0.0284]	
Ritchey 1993 Rogula 2007		0.00519189 0.00111596	1910	104	1.8% 2.2%	0.0545 [0.0443, 0.0646] 0.0043 [0.0021, 0.0065]	. —
Rogula 2007 Rosen 2009		0.00111596	3463 109	15 1	1.4%	0.0043 [0.0021, 0.0065]	
Rosin 2007		0.00913213	306	7	1.4%	0.0229 [0.0061, 0.0396]	
Ryan 2004		0.00034076	583	21	1.5%	0.0360 [0.0209, 0.0511]	
Sai 2007		0.04606423	36	3	0.1%		-
Saklani 2012	0.02416918	0.0084412	331	8	1.5%	0.0242 [0.0076, 0.0407]	
3alum 2001		0.00747651	438	11	1.6%	0.0251 [0.0105, 0.0398]	
Scholin 2011		0.00547824	786	19	1.8%	0.0242 [0.0134, 0.0349]	—
Bileri 2008	0.10144928		276	28	0.7%	0.1014 [0.0658, 0.1371]	
Bowande 2011	0.03030303		33	1		0.0303 [-0.0282, 0.0888]	
Stanton 2010	0.01293103		232	3		0.0129 [-0.0016, 0.0275]	
falwar 1997 Fachijan 2007		0.02479875	56	2		0.0357 [-0.0129, 0.0843]	
Fashjian 2007 Favlor 2006		0.04440947	22	1	0.1%	0.0455 [-0.0416, 0.1325]	
Γaylor 2006 Γaylor 2010	0.01126126	0.00500775 0.00721891	444 411	5 9	1.9% 1.6%	0.0113 [0.0014, 0.0211] 0.0219 [0.0077, 0.0360]	
raylor 2010 Fsao 2007		0.00721891	1105	7	2.1%	0.0063 [0.0017, 0.0110]	-
ran Eijck 2008		0.00236073	147	23	0.3%	0.1565 [0.0977, 0.2152]	
/arkarakis 2007		0.00876835	434	15	1.4%	0.0346 [0.0174, 0.0517]	—
Vakhlu 2000		0.01963595	71	2	0.6%	0.0282 [-0.0103, 0.0667]	+
Vakhlu 2009		0.01017339	138	2		0.0145 [-0.0054, 0.0344]	+-
Vang 1999		0.01705872	100	3		0.0300 [-0.0034, 0.0634]	
Nang 2005		0.00924262	152	2		0.0132 [-0.0050, 0.0313]	+-
ramataka 1997		0.00921939	240	5	1.4%	0.0208 [0.0028, 0.0389]	
Zbar 1993	0.03296703	0.01323503	182	6	1.0%	0.0330 [0.0070, 0.0589]	
etal (DEW CD			407000	2407	400.00	0.024410.0240.0.025	
oral (Ub.W. CT)			107669	∠407	100.0%	0.0244 [0.0210, 0.0279]	•
otal (95% CI) eterogeneity: Tau² = 0.00	. ALG. 4155 5	0.46.00.00	0.0000	. 12	v.		

1.1.2. Funnel plot of studies included in analysis of ASBO



1.2.1. Forest plot of analysis for the incidence of ASBO in studies with adequate description of follow-up for best and worst case scenario analysis.

67 studies included, 39 with no loss to follow-up (at least one long term follow-up moment in each patient included).

	.,		_	ASBO		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Aberg 2007	0.13297872	0.02476436	188	25	0.7%	0.1330 [0.0844, 0.1815]	
Abol-Enein 2001		0.00591705	238	2	2.4%	0.0084 [-0.0032, 0.0200]	- .
Adachi 1995		0.09931135	23	8	0.1%	0.3478 [0.1532, 0.5425]	
Ahlberg 1997		0.00435544	721	10	2.5%	0.0139 [0.0053, 0.0224]	
Alexakis 2003		0.05122782	19 78	1 3	0.2%	0.0526 [-0.0478, 0.1530]	
Amos 1996 Arnold 2010		0.02177456 0.02374868	100	о 6	0.9% 0.8%	0.0385 [-0.0042, 0.0811] 0.0600 [0.0135, 0.1065]	<u> </u>
Atiq 1993		0.06761234	35	7	0.0%	0.2000 [0.0675, 0.3325]	
Bartels 2012		0.01066128	399	19	1.8%	0.0476 [0.0267, 0.0685]	
Beck 1999			18912	575	2.7%	0.0304 [0.0280, 0.0329]	
Bissada 2004		0.03388301	29	1	0.4%	0.0345 [-0.0319, 0.1009]	+
Cabot 2010	0.00754717	0.00375932	530	4	2.6%	0.0075 [0.0002, 0.0149]	-
Capella 2006	0.03730273	0.00717792	697	26	2.2%	0.0373 [0.0232, 0.0514]	_
Catena 2012		0.01092695	181	4	1.8%	0.0221 [0.0007, 0.0435]	-
Champion 2003	0.00335008	0.0023649	597	2	2.7%	0.0034 [-0.0013, 0.0080]	Ť
Chang 2012		0.06708204	20	2	0.1%	0.1000 [-0.0315, 0.2315]	
Chin 2007		0.00516791	193	1	2.4%	0.0052 [-0.0049, 0.0153]	T
Choudhry 2006		0.01125775	414	23	1.7%	0.0556 [0.0335, 0.0776]	
Coran 1990 Dadan 1996	0.07	0.0255147	100 41	7 1	0.7% 0.8%	0.0700 [0.0200, 0.1200] 0.0244 [-0.0228, 0.0716]	
Dasmahapatra 1991		0.03072065	45	2	0.5%	0.0444 [-0.0158, 0.1047]	
Edna 1998	0.04449153		472	21	1.9%	0.0445 [0.0259, 0.0631]	
El-Gohary 2010		0.01854391	118	5	1.1%	0.0424 [0.0060, 0.0787]	<u> </u>
Els 1993		0.01527743	181	8	1.3%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343	169	4	1.7%	0.0237 [0.0007, 0.0466]	 -
Eshuis 2010		0.01801577	55	1	1.1%	0.0182 [-0.0171, 0.0535]	+
Fan 2001	0.07142857	0.06883029	14	1	0.1%	0.0714 [-0.0635, 0.2063]	-
Fazio 2006	0.02057613	0.00344203	1701	35	2.6%	0.0206 [0.0138, 0.0273]	-
Grant 2008	0.01075269	0.00259385	1581	17	2.7%	0.0108 [0.0057, 0.0158]	-
Guru 2010	0.03846154	0.03771464	26	1	0.4%	0.0385 [-0.0355, 0.1124]	
Ha 2008	0.10526316	0.0704059	19	2	0.1%	0.1053 [-0.0327, 0.2433]	+
Hayashi 2008		0.00692029	144	1	2.3%	0.0069 [-0.0066, 0.0205]	<u> </u>
Hernandez-Richter 1999		0.00238081	726	3	2.7%	0.0041 [-0.0005, 0.0088]	ľ
Hwang 2004		0.00271321	1372	14	2.7%	0.0102 [0.0049, 0.0155]	_
Jeong 2008		0.00412017 0.01839535	2586 182	119 12	2.5% 1.1%	0.0460 [0.0379, 0.0541]	
Kawamura 2010 Leung 2009		0.01638333	1777	20	2.7%	0.0659 [0.0299, 0.1020] 0.0113 [0.0064, 0.0162]	-
Lin 1995		0.00250247	54	4	0.4%	0.0741 [0.0042, 0.1439]	
Lumley 2002		0.01428226	154	5	1.4%	0.0325 [0.0045, 0.0605]	<u> </u>
MacLean 2002		0.00732706	1082	67	2.2%	0.0619 [0.0476, 0.0763]	_
Mais 1998		0.03148648	95	10	0.5%	0.1053 [0.0436, 0.1670]	
Majewski 2005	0.05095541	0.01755047	157	8	1.1%	0.0510 [0.0166, 0.0854]	
Menzies 1990	0.01359122	0.00264728	1913	26	2.7%	0.0136 [0.0084, 0.0188]	-
Muffly 2012	0.00150557	0.0006728	3321	5	2.7%	0.0015 [0.0002, 0.0028]	<u> </u>
Murphy 2006		0.04154492	46	4	0.3%	0.0870 [0.0055, 0.1684]	
Nelson 2006		0.00335958	784	7	2.6%	0.0089 [0.0023, 0.0155]	T
Ng 2009		0.01485116	148	5	1.4%	0.0338 [0.0047, 0.0629]	
Nieuwenhuijzen 1998		0.02121724	234	28	0.9%	0.1197 [0.0781, 0.1612]	
Nour 1996 Pace 2002		0.02570137	138 13	14 2	0.7% 0.1%	0.1014 [0.0511, 0.1518] 0.1538 [-0.0423, 0.3500]	
Ragni 1996		0.10006825 0.02150154	46	1	0.1%	0.0217 [-0.0204, 0.0639]	
Rosen 2009		0.00913213	109	1	2.0%	0.0092 [-0.0087, 0.0271]	 -
Rosin 2007		0.00854678	306	7	2.1%	0.0229 [0.0061, 0.0396]	
Saklani 2012	0.02416918	0.0084412	331	8	2.1%	0.0242 [0.0076, 0.0407]	
Scholin 2011		0.00547824	786	19	2.4%	0.0242 [0.0134, 0.0349]	-
Sileri 2008	0.10144928	0.01817361	276	28	1.1%	0.1014 [0.0658, 0.1371]	
Sowande 2011	0.03030303	0.02984036	33	1	0.5%	0.0303 [-0.0282, 0.0888]	+
Stanton 2010	0.01293103	0.00741731	232	3	2.2%	0.0129 [-0.0016, 0.0275]	 -
Tashjian 2007		0.04440947	22	1	0.3%	0.0455 [-0.0416, 0.1325]	
Taylor 2010		0.00721891	411	9	2.2%	0.0219 [0.0077, 0.0360]	_
Tsao 2007		0.00238675	1105	7	2.7%	0.0063 [0.0017, 0.0110]	<u> </u>
Varkarakis 2007		0.00876835	434	15	2.0%	0.0346 [0.0174, 0.0517]	
Wakhlu 2000 Wakhlu 2009		0.01963595 0.01017339	71 138	2 2	1.0% 1.9%	0.0282 [-0.0103, 0.0667] 0.0145 [-0.0054, 0.0344]	<u></u>
Wakniu 2009 Wang 1999		0.01017339	100	3		0.0300 [-0.0034, 0.0634]	
Wang 2005		0.00924262	152	2	2.0%	0.0132 [-0.0050, 0.0313]	 -
Zbar 1993		0.01323503	182	6	1.5%	0.0330 [0.0070, 0.0589]	
				_		. [
Total (95% CI)			47556			0.0279 [0.0230, 0.0327]	•
Heterogeneity: Tau² = 0.00	•		.00001);	$I^2 = 929$	%		-0.2 -0.1 0 0.1 0.2
Test for overall effect: Z = 1	1.33 (P < 0.000	001)					Incidence

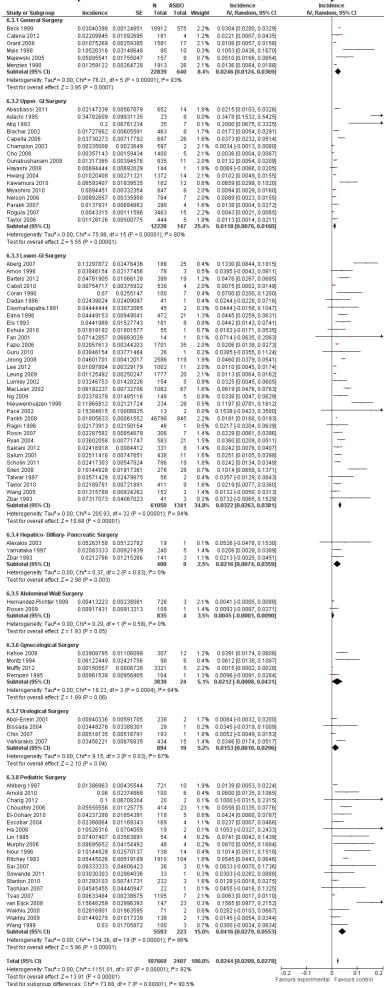
1.2.2. Forest plot of best case analysis for the incidence of ASBO

Study or Subgroup	Incidence	SE	N Total	ASBO Total	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
Aberg 2007	0.13297872	0.02476436	188	25	0.6%	0.1330 [0.0844, 0.1815]	
bol-Enein 2001	0.00581395	0.00409912	344	2	2.5%	0.0058 [-0.0022, 0.0138]	+
dachi 1995	0.34782609	0.09931135	23	8	0.0%	0.3478 [0.1532, 0.5425]	
hlberg 1997	0.01264223	0.00397247	791	10	2.5%	0.0126 [0.0049, 0.0204]	-
lexakis 2003	0.05263158	0.05122782	19	1	0.2%	0.0526 [-0.0478, 0.1530]	- ·
mos 1996	0.03846154	0.02177456	78	3	0.7%	0.0385 [-0.0042, 0.0811]	
rnold 2010	0.05042017	0.02005831	119	6	0.8%	0.0504 [0.0111, 0.0897]	
tiq 1993	0.2	0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	
Bartels 2012	0.0475	0.01063529	400	19	1.7%	0.0475 [0.0267, 0.0683]	—
Beck 1999	0.03040398	0.00124851	18912	575	2.7%	0.0304 [0.0280, 0.0329]	
Bissada 2004	0.03448276	0.03388301	29	1	0.4%	0.0345 [-0.0319, 0.1009]	
abot 2010	0.00727273	0.00362312	550	4	2.6%	0.0073 [0.0002, 0.0144]	-
Capella 2006	0.03730273	0.00717792	697	26	2.1%	0.0373 [0.0232, 0.0514]	
Catena 2012	0.02209945	0.01092695	181	4	1.6%	0.0221 [0.0007, 0.0435]	
Champion 2003	0.00281294	0.00198625	711	2	2.7%	0.0028 [-0.0011, 0.0067]	-
Chang 2012		0.06708204	20	2		0.1000 [-0.0315, 0.2315]	
Chin 2007	0.002	0.001998	500	1		0.0020 [-0.0019, 0.0059]	+
Choudhry 2006	0.05555556		414	23	1.6%	0.0556 [0.0335, 0.0776]	
Coran 1990	0.07	0.0255147	100	7	0.6%	0.0700 [0.0200, 0.1200]	
Dadan 1996	0.02439024		41	1		0.0244 [-0.0228, 0.0716]	+
Dasmahapatra 1991	0.04444444		45	2		0.0444 [-0.0158, 0.1047]	+
Edna 1998	0.04449153		472	21	1.8%	0.0445 [0.0259, 0.0631]	—
El-Gohary 2010		0.00343041	161	5	1.3%	0.0311 [0.0043, 0.0579]	
Els 1993		0.01527743	181	8	1.2%	0.0442 [0.0143, 0.0741]	
scobar 2004	0.02366864		169	4	1.6%	0.0237 [0.0007, 0.0466]	
Shuis 2010	0.02300004		60	1		0.0167 [-0.0157, 0.0491]	
				1			
an 2001	0.07142857		14			0.0714 [-0.0635, 0.2063]	_
azio 2006	0.01954216		1791	35	2.6%	0.0195 [0.0131, 0.0260]	Ľ
Frant 2008	0.01075269		1581	17	2.7%	0.0108 [0.0057, 0.0158]	
Guru 2010	0.03846154		26	1		0.0385 [-0.0355, 0.1124]	
la 2008	0.10526316	0.0704059	19	2		0.1053 [-0.0327, 0.2433]	
layashi 2008	0.00666667		150	1		0.0067 [-0.0064, 0.0197]	T
Hernandez-Richter 1999	0.00330033	0.0019023	909	3		0.0033 [-0.0004, 0.0070]	Ī
Hwang 2004	0.00816327	0.0021728	1715	14	2.7%	0.0082 [0.0039, 0.0124]	_
leong 2008	0.04197531		2835	119	2.6%	0.0420 [0.0346, 0.0494]	_
Kawamura 2010	0.06593407		182	12	0.9%	0.0659 [0.0299, 0.1020]	
_eung 2009	0.00857633	0.00190948	2332	20	2.7%	0.0086 [0.0048, 0.0123]	-
_in 1995	0.07407407	0.03563891	54	4	0.3%	0.0741 [0.0042, 0.1439]	
_umley 2002	0.03225806	0.01419166	155	5	1.3%	0.0323 [0.0044, 0.0601]	
vlacLean 2002	0.05687606	0.00674802	1178	67	2.2%	0.0569 [0.0437, 0.0701]	_
v1ais 1998	0.10526316	0.03148648	95	10	0.4%	0.1053 [0.0436, 0.1670]	
/lajewski 2005	0.02580645	0.00900546	310	8	1.9%	0.0258 [0.0082, 0.0435]	
Menzies 1990	0.01032976	0.00201534	2517	26	2.7%	0.0103 [0.0064, 0.0143]	-
/luffly 2012	0.00150331	0.00067179	3326	5	2.8%	0.0015 [0.0002, 0.0028]	•
Murphy 2006	0.07017544	0.03383418	57	4	0.4%	0.0702 [0.0039, 0.1365]	
Velson 2006	0.00892857	0.00335958	784	7	2.6%	0.0089 [0.0023, 0.0155]	-
Ng 2009	0.03378378	0.01485116	148	5	1.2%	0.0338 [0.0047, 0.0629]	
lieuwenhuijzen 1998	0.11965812		234	28	0.8%	0.1197 [0.0781, 0.1612]	
Nour 1996	0.10144928		138	14	0.6%	0.1014 [0.0511, 0.1518]	
ace 2002	0.15384615		13	2		0.1538 [-0.0423, 0.3500]	
Ragni 1996	0.02173913		46	1		0.0217 [-0.0204, 0.0639]	
Rosen 2009	0.00917431		109	1		0.0092 [-0.0087, 0.0271]	 -
Rosin 2007	0.00317431		306	7	2.0%	0.0229 [0.0061, 0.0396]	
Rosiii 2007 Baklani 2012	0.02228412				2.1%	0.0223 [0.0070, 0.0376]	
			359	8 40			_
Scholin 2011	0.01968912	0.0044723	965	19	2.5%	0.0197 [0.0109, 0.0285]	
Bileri 2008 Sawanda 2011	0.10144928		276	28	1.0%	0.1014 [0.0658, 0.1371]	
Sowande 2011	0.03030303		33	1		0.0303 [-0.0282, 0.0888]	
Stanton 2010	0.01293103		232	3		0.0129 [-0.0016, 0.0275]	
ashjian 2007	0.04545455		22	1		0.0455 [-0.0416, 0.1325]	
aylor 2010	0.01894737		475	9	2.3%	0.0189 [0.0067, 0.0312]	-
sao 2007	0.00633484		1105	7	2.7%	0.0063 [0.0017, 0.0110]	ľ
/arkarakis 2007	0.03348214		448	15	2.0%	0.0335 [0.0168, 0.0501]	—
Vakhlu 2000	0.01923077	0.01346682	104	2		0.0192 [-0.0072, 0.0456]	
Vakhlu 2009	0.01449275	0.01017339	138	2	1.7%	0.0145 [-0.0054, 0.0344]	 -
Vang 1999	0.03	0.01705872	100	3	1.0%	0.0300 [-0.0034, 0.0634]	
Vang 2005	0.01036269	0.00728947	193	2	2.1%	0.0104 [-0.0039, 0.0246]	 -
bar 1993	0.01058201	0.00429717	567	6	2.5%	0.0106 [0.0022, 0.0190]	-
						•	
otal (95% CI)			51281	1293	100.0%	0.0247 [0.0204, 0.0290]	♦
						·	
eterogeneity: Tau ² = 0.00	; Chi²= 854.28.	. df = 66 (P < F	1,0000011	J*= 924	70		-0.2 -0.1 0 0.1

1.2.3. Forest plot of worst case analysis for the incidence of ASBO

Study or Subgroup	Incidence	SE	N Total	ASBO Total	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
berg 2007	0.13297872	0.02476436	188	25	1.5%	0.1330 [0.0844, 0.1815]	
bol-Enein 2001	0.31395349	0.02502247	344	108	1.5%	0.3140 [0.2649, 0.3630]	
dachi 1995	0.34782609	0.09931135	23	8	0.5%	0.3478 [0.1532, 0.5425]	_
hlberg 1997	0.1011378	0.0107205	791	80	1.7%	0.1011 [0.0801, 0.1221]	
lexakis 2003	0.05263158	0.05122782	19	1		0.0526 [-0.0478, 0.1530]	
mos 1996	0.03846154		78	3	1.6%	0.0385 [-0.0042, 0.0811]	
rnold 2010	0.21008403	0.03734337	119	25	1.3%	0.2101 [0.1369, 0.2833]	
tiq 1993	0.2	0.06761234	35	7	0.8%	0.2000 [0.0675, 0.3325]	
artels 2012	0.05	0.01089725	400	20	1.7%	0.0500 [0.0286, 0.0714]	
eck 1999	0.03040398	0.00124851	18912	575	1.8%	0.0304 [0.0280, 0.0329]	
issada 2004	0.03448276	0.03388301	29	1	1.3%	0.0345 [-0.0319, 0.1009]	+
abot 2010	0.04363636	0.00871073	550	24	1.7%	0.0436 [0.0266, 0.0607]	-
apella 2006	0.03730273	0.00717792	697	26	1.8%	0.0373 [0.0232, 0.0514]	-
atena 2012	0.02209945	0.01092695	181	4	1.7%	0.0221 [0.0007, 0.0435]	
hampion 2003	0.16315049	0.01385744	711	116	1.7%	0.1632 [0.1360, 0.1903]	
Chang 2012		0.06708204	20	2	0.8%	0.1000 [-0.0315, 0.2315]	
Chin 2007		0.02175059	500	308	1.6%	0.6160 [0.5734, 0.6586]	
Choudhry 2006		0.01125775	414	23	1.7%	0.0556 [0.0335, 0.0776]	
oran 1990	0.07	0.0255147	100	7	1.5%	0.0700 [0.0200, 0.1200]	
)adan 1996	0.02439024		41	1		0.0244 [-0.0228, 0.0716]	
)asmahapatra 1991		0.03072065	45	2		0.0444 [-0.0158, 0.1047]	
·							
Edna 1998	0.04449153		472	21	1.7%	0.0445 [0.0259, 0.0631]	
El-Gohary 2010	0.29813665		161	48	1.3%	0.2981 [0.2275, 0.3688]	
Els 1993		0.01527743	181	8	1.7%	0.0442 [0.0143, 0.0741]	
scobar 2004	0.02366864		169	4	1.7%	0.0237 [0.0007, 0.0466]	
shuis 2010		0.03872983	60	6	1.2%	0.1000 [0.0241, 0.1759]	
an 2001	0.07142857		14	1	0.7%	0.0714 [-0.0635, 0.2063]	
azio 2006	0.06979341	0.00602073	1791	125	1.8%	0.0698 [0.0580, 0.0816]	-
Frant 2008	0.01075269	0.00259385	1581	17	1.8%	0.0108 [0.0057, 0.0158]	~
uru 2010	0.03846154	0.03771464	26	1	1.3%	0.0385 [-0.0355, 0.1124]	
la 2008	0.10526316	0.0704059	19	2	0.7%	0.1053 [-0.0327, 0.2433]	+
łayashi 2008	0.04666667	0.01722186	150	7	1.6%	0.0467 [0.0129, 0.0804]	
lernandez-Richter 1999	0.20462046		909	186	1.7%	0.2046 [0.1784, 0.2308]	-
lwang 2004	0.20816327		1715	357	1.7%	0.2082 [0.1889, 0.2274]	
eong 2008		0.00631217	2835	368	1.8%	0.1298 [0.1174, 0.1422]	_
Kawamura 2010	0.06593407		182	12	1.6%	0.0659 [0.0299, 0.1020]	
_eung 2009	0.24656947		2332	575	1.7%	0.2466 [0.2291, 0.2641]	
in 1995	0.24030347		54	4	1.3%	0.0741 [0.0042, 0.1439]	
					1.7%	0.0387 [0.0083, 0.0691]	
Lumley 2002	0.03870968		155	460			
MacLean 2002	0.13837012		1178	163	1.7%	0.1384 [0.1187, 0.1581]	
Mais 1998	0.10526316		95	10	1.4%	0.1053 [0.0436, 0.1670]	
Majewski 2005	0.51935484		310	161	1.4%	0.5194 [0.4637, 0.5750]	
Menzies 1990		0.00863438	2517	630	1.7%	0.2503 [0.2334, 0.2672]	
1uffly 2012	0.00300661		3326	10	1.8%	0.0030 [0.0011, 0.0049]	T T
1urphy 2006	0.26315789	0.05832544	57	15	0.9%	0.2632 [0.1488, 0.3775]	_
lelson 2006	0.00892857	0.00335958	784	7	1.8%	0.0089 [0.0023, 0.0155]	_
lg 2009	0.03378378	0.01485116	148	5	1.7%	0.0338 [0.0047, 0.0629]	
lieuwenhuijzen 1998	0.11965812	0.02121724	234	28	1.6%	0.1197 [0.0781, 0.1612]	
lour 1996	0.10144928	0.02570137	138	14	1.5%	0.1014 [0.0511, 0.1518]	
ace 2002	0.15384615	0.10006825	13	2	0.4%	0.1538 [-0.0423, 0.3500]	-
Ragni 1996	0.02173913	0.02150154	46	1		0.0217 [-0.0204, 0.0639]	+
Rosen 2009	0.00917431		109	1		0.0092 [-0.0087, 0.0271]	 -
Rosin 2007	0.02287582		306	7	1.7%	0.0229 [0.0061, 0.0396]	
Baklani 2012	0.10027855		359	36	1.7%	0.1003 [0.0692, 0.1313]	
Scholin 2011	0.20518135		965	198	1.7%	0.2052 [0.1797, 0.2307]	_
Bileri 2008	0.10144928		276	28	1.6%	0.1014 [0.0658, 0.1371]	
			33			0.0303 [-0.0282, 0.0888]	
Rowande 2011	0.03030303			1			
tanton 2010	0.01293103		232	3		0.0129 [-0.0016, 0.0275]	
ashjian 2007		0.04440947	22	1		0.0455 [-0.0416, 0.1325]	
aylor 2010	0.15368421		475	73	1.7%	0.1537 [0.1213, 0.1861]	
sao 2007		0.00238675	1105	7	1.8%	0.0063 [0.0017, 0.0110]	٢
arkarakis 2007	0.06473214		448	29	1.7%	0.0647 [0.0419, 0.0875]	—
Vakhlu 2000	0.33653846		104	35	1.1%	0.3365 [0.2457, 0.4274]	
Vakhlu 2009	0.01449275	0.01017339	138	2		0.0145 [-0.0054, 0.0344]	
Vang 1999	0.03	0.01705872	100	3	1.6%	0.0300 [-0.0034, 0.0634]	
Vang 2005	0.22279793	0.02995325	193	43	1.4%	0.2228 [0.1641, 0.2815]	-
Zbar 1993	0.68959436		567	391	1.6%	0.6896 [0.6515, 0.7277]	
	-	-				. ,	
otal (95% CI)			51281	5018	100.0%	0.1166 [0.1015, 0.1317]	•
eterogeneity: Tau² = 0.00;	: Chi²= 6063 0	1. df = 66 (P <	0.00001	z = 99	1%		-0.2 -0.1 0 0.1

1.3.1. Forest plot of the incidence of ASBO, stratified by anatomical location



1.4.1. Forest plot of the incidence of ASBO, stratified by surgical technique 14 excluded. surgical technique not specified in 9 studies, 5 studies both techniques without data per subgroup. N ASBO Incidence Incidence

			N	ASBO		Incidence	Incidence	
Study or Subgroup 6.4.1 Laparotomy	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95	% CI
Aberg 2007	0.13297872	0.02476436	188	25	0.6%	0.1330 [0.0844, 0.1815]		
Abol-Enein 2001	0.00840336	0.00591705	238	2	2.0%	0.0084 [-0.0032, 0.0200]	+	
Adachi 1995		0.09931135	23	8	0.0%	0.3478 [0.1532, 0.5425]		→
Ahlberg 1997 Alexakis 2003	0.01386963	0.00435544	721 19	10 1	2.2% 0.2%	0.0139 [0.0053, 0.0224] 0.0526 [-0.0478, 0.1530]		
Arnold 2010		0.03122762	100	6	0.6%	0.0600 [0.0135, 0.1065]		_
Atiq 1993		0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	-	\longrightarrow
Bartels 2012	0.06730769	0.0173728	208	14	1.0%	0.0673 [0.0333, 0.1014]		-
Beck 1999 Bissada 2004	0.03040398 0.03448276	0.00124851	18912 29	575 1	2.4% 0.4%	0.0304 [0.0280, 0.0329]		_
Catena 2012		0.01092695	181	4	1.5%	0.0345 [-0.0319, 0.1009] 0.0221 [0.0007, 0.0435]	_	
Chang 2012		0.12649111	10	2	0.0%	0.2000 [-0.0479, 0.4479]	-	
Choudhry 2006		0.01125775	414	23	1.5%	0.0556 [0.0335, 0.0776]	-	
Coran 1990	0.07	0.0255147	100	7	0.6%	0.0700 [0.0200, 0.1200]		_
Dadan 1996 Dasmahapatra 1991	0.02439024 0.04444444	0.02409097	41 45	1 2	0.6% 0.4%	0.0244 [-0.0228, 0.0716] 0.0444 [-0.0158, 0.1047]	<u> </u>	_
Edna 1998	0.04449153		472	21	1.7%	0.0445 [0.0259, 0.0631]	-	
El-Gohary 2010	0.04237288	0.01854391	118	5	0.9%	0.0424 [0.0060, 0.0787]	-	
Els 1993		0.01527743	181	8	1.1%	0.0442 [0.0143, 0.0741]	_	
Escobar 2004 Eshuis 2010	0.02366864	0.01169343	169 26	4 1	1.4% 0.3%	0.0237 [0.0007, 0.0466] 0.0385 [-0.0355, 0.1124]		_
Fan 2001	0.07142857		14	1	0.1%	0.0714 [-0.0635, 0.2063]		
Fazio 2006		0.00344203	1701	35	2.3%	0.0206 [0.0138, 0.0273]	-	
Grant 2008	0.01075269		1581	17	2.3%	0.0108 [0.0057, 0.0158]	-	
Ha 2008	0.10526316	0.0704059	19	2	0.1%			
Hayashi 2008 Kawamura 2009	0.00694444 0.06593407		144 182	1 12	1.9% 0.9%	0.0069 [-0.0066, 0.0205] 0.0659 [0.0299, 0.1020]	Γ	_
Kehoe 2009		0.01039333	307	12	1.5%	0.0391 [0.0174, 0.0608]	_	
Lin 1995	0.07407407	0.03563891	54	4	0.3%	0.0741 [0.0042, 0.1439]	 	_
Mais 1998		0.03148648	95	10	0.4%	0.1053 [0.0436, 0.1670]	-	
Majewski 2005 Montz 1994	0.07692308	0.02793358 0.02421756	91 98	7 6	0.5% 0.6%	0.0769 [0.0222, 0.1317]		_
Murphy 2006		0.02421756	98 46	4	0.2%	0.0612 [0.0138, 0.1087] 0.0870 [0.0055, 0.1684]		
Nelson 2006	0.00873362	0.0043477	458	4	2.2%	0.0087 [0.0002, 0.0173]	-	
Ng 2009	0.06756757		74	5	0.5%	0.0676 [0.0104, 0.1248]		_
Nieuwenhuijzen 1998		0.02121724	234	28	0.7%	0.1197 [0.0781, 0.1612]	-	-
Nour 1996	0.10144928		138	14 1	0.6%	0.1014 [0.0511, 0.1518]		_
Ragni 1996 Ritchey 1993	0.02173913	0.02150154	46 1910	104	0.7% 2.1%	0.0217 [-0.0204, 0.0639] 0.0545 [0.0443, 0.0646]	-	
Saklani 2012	0.02673797		187	5	1.4%	0.0267 [0.0036, 0.0499]	-	
Salum 2001	0.02511416	0.00747651	438	11	1.9%	0.0251 [0.0105, 0.0398]	-	
Scholin 2011		0.00694842	403	8	1.9%	0.0199 [0.0062, 0.0335]	_	
Sileri 2008 Sowande 2011	0.10144928 0.03030303		276 33	28 1	0.9% 0.4%	0.1014 [0.0658, 0.1371] 0.0303 [-0.0282, 0.0888]	1.	
Stanton 2010	0.03030303		62	3	0.4%			_
Talwar 1997		0.02479875	56	2		0.0357 [-0.0129, 0.0843]	+	
Tashjian 2007	0.04545455		22	1	0.2%	0.0455 [-0.0416, 0.1325]		_
Taylor 2006		0.00500775	444	5	2.1% 2.1%	0.0113 [0.0014, 0.0211]		
Tsao 2007 van Eijck 2008	0.01257862	0.0051028 0.02996393	477 147	6 23	0.4%	0.0126 [0.0026, 0.0226] 0.1565 [0.0977, 0.2152]		
Wakhlu 2000	0.02816901		71	2	0.8%	0.0282 [-0.0103, 0.0667]	 	
Wang 1999		0.01705872	100	3		0.0300 [-0.0034, 0.0634]	-	
Wang 2005		0.00924262	152	2		0.0132 [-0.0050, 0.0313]		
Zbar 1993 Subtotal (95% CI)	0.03296703	0.01323503	182 32472	6 1100	1.3% 54.8 %	0.0330 [0.0070, 0.0589] 0.0375 [0.0313, 0.0438]		
Heterogeneity: Tau² = 0.00 Test for overall effect: Z = 1).00001);	2= 82%	6			
6.4.2 Laparoscopy								
Abasbassi 2011	0.02147239	0.00567679	652	14	2.1%	0.0215 [0.0103, 0.0326]	-	
Bartels 2012	0.02512563	0.01109446	199	5	1.5%	0.0251 [0.0034, 0.0469]	 -	
Blachar 2002	0.01727862		463	8	2.0%	0.0173 [0.0054, 0.0291] 0.0075 [0.0002, 0.0149]		
Cabot 2010 Capella 2006		0.00375932 0.00717792	530 697	4 26	2.2% 1.9%	0.0075 [0.0002, 0.0149]	Ĩ-	
Champion 2003	0.00335008	0.0023649	597	2		0.0034 [-0.0013, 0.0080]	-	
Chang 2012	0	0	10	0		Not estimable		
Chin 2007	0.00518135		193	1	2.1%		t	
Cho 2006 Eshuis 2010	0.00357143 0.03448276		1400 29	5 1	2.4% n.4%	0.0036 [0.0004, 0.0067] 0.0345 [-0.0319, 0.1009]	1	_
Gunabushanam 2009		0.003386301	835	11	2.2%	0.0132 [0.0054, 0.0209]	-	
Guru 2010		0.03771464	26	1		0.0385 [-0.0355, 0.1124]	+-	_
Hernandez-Richter 1999	0.00413223		726	3	2.3%		<u> </u>	
Hwang 2004	0.01020408		1372	14	2.3%	0.0102 [0.0049, 0.0155]	_	
Jeong 2008 Lumley 2002		0.00412017 0.01428226	2586 154	119 5	2.2% 1.2%	0.0460 [0.0379, 0.0541] 0.0325 [0.0045, 0.0605]		
Majewski 2005		0.01428226	64	1		0.0156 [-0.0148, 0.0460]	+	
Miyashiro 2010		0.00332354	847	8	2.3%	0.0094 [0.0029, 0.0160]	-	
Nelson 2006		0.00306278	326	1	2.3%	0.0031 [-0.0029, 0.0091]	t	
Ng 2009	0 16204616	0 10006026	74	0	0.00	Not estimable		,
Pace 2002 Parakh 2007		0.10006825 0.00684882	13 290	2 4	1.9%	0.1538 [-0.0423, 0.3500] 0.0138 [0.0004, 0.0272]	ļ	
Rogula 2007		0.00111596	3463	15	2.4%	0.0043 [0.0021, 0.0065]	ļ	
Rosin 2007	0.02287582	0.00854678	306	7	1.8%	0.0229 [0.0061, 0.0396]	-	
Sai 2007		0.04606423	36	3		0.0833 [-0.0070, 0.1736]	 	
Saklani 2012 Scholin 2011		0.01190218	144	3 11	1.4%	0.0208 [-0.0025, 0.0442]	<u> </u>	
Scholin 2011 Stanton 2010	0.02872063	0.00853433	383 170	11 0	1.6%	0.0287 [0.0120, 0.0454] Not estimable		
Tsao 2007		0.00159109	628	1		0.0016 [-0.0015, 0.0047]	+	
Subtotal (95% CI)			17213	275		0.0135 [0.0095, 0.0176]	•	
Heterogeneity: $Tau^2 = 0.00$ Test for overall effect: $Z = 6$).00001);	2 = 869	6			
	z (1 - 0.0001	,						
Total (95% CI)	. Oher der se	de 20.00	49685			0.0268 [0.0225, 0.0311]		
Heterogeneity: $Tau^2 = 0.00$ Test for overall effect: $Z = 1$			J.UUUU1);	r= 90%	b			0.1 0.2
Test for overall effect; Z = 1			0,000011	, J² = 97	5%		Incid	lence

1.4.2. Forest plot for the incidence of ASBO compared between laparoscopy and laparotomy

Laparos	сору	Laparot	omy		Odds Ratio	Odds Ratio
Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
199	5	208	14		Not estimable	
0	10	2	10	6.0%	0.16 [0.01, 3.85]	•
1	29	1	26	7.2%	0.89 [0.05, 15.04]	-
1	64	7	91	10.9%	0.19 [0.02, 1.59]	
1	326	4	458	10.4%	0.35 [0.04, 3.14]	
0	74	5	74	6.9%	0.08 [0.00, 1.56]	
3	144	5	187	17.0%	0.77 [0.18, 3.30]	
11	383	8	403	23.9%	1.46 [0.58, 3.67]	
0	170	3	62	6.6%	0.05 [0.00, 0.98]	
1	628	6	477	10.9%	0.13 [0.02, 1.04]	-
	1833		1802	100.0%	0.38 [0.16, 0.91]	•
217		249				
0.58; Chi ²	= 12.69	3, df = 8 (F	P = 0.12); I ^z = 379	6	0.01 0.1 1 10 100
Z = 2.19 (F	P = 0.03)			Favours laparoscopy Favours laparotomy	
	199 0 1 1 1 0 3 11 0 1	199 5 0 10 1 29 1 64 1 326 0 74 3 144 11 383 0 170 1 628 217 : 0.58; Chi² = 12.69	Events Total Events 199 5 208 0 10 2 1 29 1 1 64 7 1 326 4 0 74 5 3 144 5 11 383 8 0 170 3 1 628 6 test 217 249	Events Total Events Total 199 5 208 14 0 10 2 10 1 29 1 26 1 64 7 91 1 326 4 458 0 74 5 74 3 144 5 187 11 383 8 403 0 170 3 62 1 628 6 477 1833 1802 217 249 0.58; Chi² = 12.69, df = 8 (P = 0.12)	Events Total Events Total Weight 199 5 208 14 0 10 2 10 6.0% 1 29 1 26 7.2% 1 64 7 91 10.9% 1 326 4 458 10.4% 0 74 5 74 6.9% 3 144 5 187 17.0% 11 383 8 403 23.9% 0 170 3 62 6.6% 1 628 6 477 10.9% 217 249 100.0% 217 249 0.58; Chi² = 12.69, df= 8 (P = 0.12); l² = 379 379 379	Events Total Events Total Weight M-H, Random, 95% CI 199 5 208 14 Not estimable 0 10 2 10 6.0% 0.16 [0.01, 3.85] 1 29 1 26 7.2% 0.89 [0.05, 15.04] 1 64 7 91 10.9% 0.19 [0.02, 1.59] 1 326 4 458 10.4% 0.35 [0.04, 3.14] 0 74 5 74 6.9% 0.08 [0.00, 1.56] 3 144 5 187 17.0% 0.77 [0.18, 3.30] 11 383 8 403 23.9% 1.46 [0.58, 3.67] 0 170 3 62 6.6% 0.05 [0.00, 0.98] 1 628 6 477 10.9% 0.13 [0.02, 1.04] 1833 1802 100.0% 0.38 [0.16, 0.91] 217 249 0.58; Chi² = 12.69, df= 8 (P = 0.12); I² = 37%

1.5.1. Sensitivity analysis of the incidence of ASBO, impact of individual studies

1.5.1. Sensitivity analysis of the incidence		
Study	Point estimate	95%CI
All available studies	0.0244	0.0210-0.0279
Abasbassi 2011	0.0245	0.0210-0.0280
Aberg 2007	0.0239	0.0205-0.0273
Abol-Enein 2001	0.0247	0.0212-0.0282
Adachi 1995	0.0243	0.0208-0.0277
Ahlberg 1997	0.0247	0.0212-0.0281
Alexakis 2003	0.0244	0.0209-0.0278
Amos 1996	0.0243	0.0209-0.0278
Arnold 2010	0.0242	0.0208-0.0277
Atiq 1993	0.0243	0.0208-0.0277
Bartels 2012	0.0243	0.0206-0.0277
Beck 1999	0.0241	0.0204-0.0270
Bissada 2004	0.0244	0.0209-0.0278
Blachar 2002	0.0246	0.0211-0.0280
Cabot 2010	0.0248	0.0213-0.0283
Capella 2006	0.0242	0.0207-0.0276
Catena 2012	0.0244	0.0210-0.0279
Champion 2003	0.0249	0.0214-0.0284
Chang 2012	0.0244	0.0209-0.0278
Chin 2007	0.0248	0.0213-0.0283
Cho 2006	0.0250	0.0215-0.0285
Choudhry 2006	0.0240	0.0206-0.0275
Coran 1990	0.0242	0.0208-0.0277
Dadan 1996	0.0244	0.0210-0.0279
Dasmahapatra 1991	0.0244	0.0209-0.0278
Edna 1998	0.0244	0.0207-0.0276
El-Gohary 2010	0.0241	0.0208-0.0277
Els 1993	0.0242	0.0208-0.0277
Escobar 2004	0.0244	0.0210-0.0279
Eshuis 2010	0.0245	0.0210-0.0279
Fan 2001	0.0244	0.0209-0.0278
Fazio 2006	0.0245	0.0210-0.0280
Grant 2008	0.0248	0.0213-0.0283
Gunabushanam 2009	0.0247	0.0212-0.0282
Guru 2010	0.0244	0.0209-0.0278
Ha 2008	0.0244	0.0209-0.0278
Hayashi 2008	0.0247	0.0212-0.0282
Hernandez-Richter 1999	0.0249	0.0214-0.0284
Hwang 2004	0.0248	0.0213-0.0283
Jeong 2008	0.0238	0.0204-0.0272
Kawamura 2009	0.0241	0.0207-0.0276
Kehoe 2009	0.0242	0.0208-0.0277
Lee 2012	0.0242	0.0213-0.0282
Leung 2009	0.0248	0.0213-0.0282
Lin 1995	0.0243	0.0209-0.0277
Lumley 2002	0.0243	0.0209-0.0278
MacLean 2002	0.0237	0.0202-0.0271
Mais 1998	0.0242	0.0207-0.0276
Majewski 2005	0.0242	0.0208-0.0277
Menzies 1990	0.0247	0.0272-0.0282
Miyashiro 2010	0.0248	0.0213-0.0283
Montz 1994	0.0242	0.0208-0.0277
Muffly 2012	0.0246	0.0213-0.0280
Murphy 2006	0.0243	0.0209-0.0277
Nelson 2006	0.0248	0.0213-0.0283
Ng 2009	0.0243	0.0209-0.0278
Nieuwenhuijzen 1998	0.0243	0.0204-0.0273
Nour 1996	0.0238	0.0204-0.0275
Pace 2002	0.0241	
		0.0209-0.0278
Parakh 2007	0.0246	0.0211-0.0281
Parikh 2008	0.0254	0.0216-0.0291
Ragni 1996	0.0244	0.0210-0.0279

Rempen 1995	0.0246	0.0212-0.0281
Ritchey 1993	0.0236	0.0202-0.0270
Rogula 2007	0.0251	0.0216-0.0287
Rosen 2009	0.0246	0.0212-0.0281
Rosin 2007	0.0244	0.0210-0.0279
Ryan 2004	0.0242	0.0208-0.0277
Sai 2007	0.0243	0.0209-0.0278
Saklani 2012	0.0244	0.0210-0.0279
Salum 2001	0.0244	0.0209-0.0279
Scholin 2011	0.0244	0.0210-0.0279
Sileri 2008	0.0238	0.0204-0.0273
Sowande 2011	0.0244	0.0210-0.0278
Stanton 2010	0.0246	0.0211-0.0281
Talwar 1997	0.0244	0.0209-0.0278
Tashjian 2007	0.0244	0.0209-0.0278
Taylor 2006	0.0247	0.0212-0.0282
Taylor 2010	0.0245	0.0210-0.0279
Tsao 2007	0.0249	0.0214-0.0284
van Eijck 2008	0.0239	0.0205-0.0274
Varkarakis 2007	0.0243	0.0208-0.0277
Wakhlu 2000	0.0244	0.0209-0.0278
Wakhlu 2009	0.0246	0.0211-0.0280
Wang 1999	0.0244	0.0209-0.0278
Wang 2005	0.0246	0.0211-0.0281
Yamataka 1997	0.0245	0.0210-0.0279
Zbar 1993	0.0243	0.0209-0.0278

1.6.1. Sensitivity analysis of the incidence of ASBO, stratified by quality of study N ASBO Incidence Inc

1,0,1, 5,0,15,11, 1	<i>c c c c c c c c c c</i>	010 01 01	N	ASBO		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
6.6.1 Low Quality Studies Abasbassi 2011	0.02147239	0.00567679	652	14	1.8%	0.0215 [0.0103, 0.0326]	-
Blachar 2002	0.01727862		463	8	1.7%	0.0173 [0.0054, 0.0291]	-
Chin 2007	0.00518135		193	1	1.8%	0.0052 [-0.0049, 0.0153]	+
Cho 2006		0.00159434	1400	5 11	2.1% 2.0%	0.0036 [0.0004, 0.0067] 0.0132 [0.0054, 0.0209]	_
Gunabushanam 2009 Guru 2010		0.00394576 0.03771464	835 26	1	0.2%		+
Hernandez-Richter 1999	0.00413223		726	3	2.1%	0.0041 [-0.0005, 0.0088]	-
Majewski 2005	0.05095541		157	8	0.7%	0.0510 [0.0166, 0.0854]	
Parakh 2007 Ragni 1996		0.00684882 0.02150154	290 46	4	1.6% 0.5%	0.0138 [0.0004, 0.0272] 0.0217 [-0.0204, 0.0639]	
Rempen 1995		0.00956905	104	1	1.3%	0.0096 [-0.0091, 0.0284]	 -
Ryan 2004		0.00771747	583	21	1.5%	0.0360 [0.0209, 0.0511]	_
Sai 2007		0.04606423	36	3		0.0833 [-0.0070, 0.1736]	
Sowande 2011 Talwar 1997		0.02984036 0.02479875	33 56	1 2	0.3%	0.0303 [-0.0282, 0.0888] 0.0357 [-0.0129, 0.0843]	
Wakhlu 2000	0.02816901		71	2	0.6%		
Wang 2005	0.01315789	0.00924262	152	2	1.4%	0.0132 [-0.0050, 0.0313]	 -
Yamataka 1997	0.02083333	0.00921939	240	5	1.4%	0.0208 [0.0028, 0.0389]	_
Subtotal (95% CI) Heterogeneity: Tau ² = 0.00	- Chiz - 49.06	df = 17 /P = 0.0	6063	93 65%	21.6%	0.0148 [0.0094, 0.0202]	*
Test for overall effect: Z = 5			.001),1 =	0370			
	o						
6.6.2 Intermediate Quality Abol-Enein 2001		0.00591705	238	2	1.7%	0.000410.0022.0.02001	_
Adachi 1995		0.00391703	230	8	0.0%	0.0084 [-0.0032, 0.0200] 0.3478 [0.1532, 0.5425]	→
Ahlberg 1997		0.00435544	721	10	1.9%	0.0139 [0.0053, 0.0224]	_
Alexakis 2003		0.05122782	19	1	0.1%	0.0526 [-0.0478, 0.1530]	
Amos 1996	0.03846154		78	3	0.5%	0.0385 [-0.0042, 0.0811]	
Arnold 2010 Atiq 1993		0.02374868 0.06761234	100 35	6 7	0.4%	0.0600 [0.0135, 0.1065] 0.2000 [0.0675, 0.3325]	
Bartels 2012	0.04761905		399	19	1.2%	0.0476 [0.0267, 0.0685]	-
Beck 1999		0.00124851	18912	575	2.2%	0.0304 [0.0280, 0.0329]	
Bissada 2004	0.03448276		29	1	0.2%	0.0345 [-0.0319, 0.1009]	
Cabot 2010 Capella 2006	0.00754717 0.03730273		530 697	4 26	2.0% 1.6%	0.0075 [0.0002, 0.0149] 0.0373 [0.0232, 0.0514]	Γ_
Champion 2003	0.00335008	0.0023649	597	20	2.1%	0.0034 [-0.0013, 0.0080]	<u> </u>
Chang 2012	0.1	0.06708204	20	2	0.1%	0.1000 [-0.0315, 0.2315]	
Coran 1990	0.07	0.0255147	100	7	0.4%	0.0700 [0.0200, 0.1200]	
Dadan 1996 Dasmahapatra 1991	0.02439024 0.04444444		41 45	1 2	0.4%	0.0244 [-0.0228, 0.0716] 0.0444 [-0.0158, 0.1047]	
Edna 1998	0.04444444		472	21	1.3%	0.0445 [0.0259, 0.0631]	
El-Gohary 2010	0.04237288		118	5	0.6%	0.0424 [0.0060, 0.0787]	
Els 1993		0.01527743	181	8	0.8%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343	169	4	1.1%	0.0237 [0.0007, 0.0466]	
Eshuis 2010 Fan 2001	0.07142857	0.01801577 0.06883029	55 14	1	0.7% 0.1%	0.0182 [-0.0171, 0.0535] 0.0714 [-0.0635, 0.2063]	
Ha 2008	0.10526316	0.0704059	19	2	0.1%	0.1053 [-0.0327, 0.2433]	
Hwang 2004		0.00271321	1372	14	2.1%	0.0102 [0.0049, 0.0155]	_
Jeong 2008		0.00412017	2586	119	1.9%	0.0460 [0.0379, 0.0541]	
Kawamura 2009 Kehoe 2009		0.01839535 0.01106099	182 307	12 12	0.6% 1.2%	0.0659 [0.0299, 0.1020] 0.0391 [0.0174, 0.0608]	
Lee 2012	0.01097804		1002	11	2.0%	0.0110 [0.0045, 0.0174]	-
Leung 2009		0.00250247	1777	20	2.1%	0.0113 [0.0064, 0.0162]	-
Lin 1995	0.07407407		54	4	0.2%	0.0741 [0.0042, 0.1439]	
Lumley 2002 MacLean 2002	0.03246753	0.01428226 0.00732706	154 1082	5 67	0.9% 1.6%	0.0325 [0.0045, 0.0605] 0.0619 [0.0476, 0.0763]	-
Mais 1998		0.03148648	95	10	0.3%	0.1053 [0.0436, 0.1670]	
Menzies 1990		0.00264728	1913	26	2.1%	0.0136 [0.0084, 0.0188]	-
Miyashiro 2010 Montz 1994		0.00332354 0.02421756	847	8 6	2.0% 0.4%	0.0094 [0.0029, 0.0160]	
Murphy 2006		0.02421730	98 46	4	0.4%	0.0612 [0.0138, 0.1087] 0.0870 [0.0055, 0.1684]	
Nelson 2006		0.00335958	784	7	2.0%	0.0089 [0.0023, 0.0155]	-
Ng 2009		0.01485116	148	5	0.9%	0.0338 [0.0047, 0.0629]	
Nieuwenhuijzen 1998 Nour 1996		0.02121724 0.02570137	234 138	28 14	0.5% 0.4%	0.1197 [0.0781, 0.1612] 0.1014 [0.0511, 0.1518]	
Pace 2002		0.10006825	13	2	0.0%		
Ritchey 1993		0.00519189	1910	104	1.8%	0.0545 [0.0443, 0.0646]	-
Rogula 2007		0.00111596	3463	15	2.2%	0.0043 [0.0021, 0.0065]	·
Rosen 2009 Rosin 2007		0.00913213 0.00854678	109 306	1 7	1.4%	0.0092 [-0.0087, 0.0271] 0.0229 [0.0061, 0.0396]	<u> </u>
Salum 2001		0.000747651	438	11	1.6%	0.0251 [0.0105, 0.0398]	-
Scholin 2011		0.00547824	786	19	1.8%	0.0242 [0.0134, 0.0349]	-
Sileri 2008	0.10144928		276	28	0.7%	0.1014 [0.0658, 0.1371]	
Stanton 2010 Tashjian 2007	0.01293103	0.00741731	232 22	3 1	1.6% 0.1%	0.0129 [-0.0016, 0.0275] 0.0455 [-0.0416, 0.1325]	
Taylor 2006		0.00500775	444	5	1.9%	0.0113 [0.0014, 0.0211]	
Taylor 2010	0.02189781	0.00721891	411	9	1.6%	0.0219 [0.0077, 0.0360]	
Tsao 2007		0.00238675	1105	7	2.1%	0.0063 [0.0017, 0.0110]	
van Eijck 2008 Varkarakis 2007		0.02996393 0.00876835	147 434	23 15	0.3% 1.4%	0.1565 [0.0977, 0.2152] 0.0346 [0.0174, 0.0517]	
Wakhlu 2009		0.01017339	138	2		0.0145 [-0.0054, 0.0344]	
Wang 1999		0.01705872	100	3	0.7%	0.0300 [-0.0034, 0.0634]	
Zbar 1993 Subtotal (95% CI)	0.03296703	0.01323503	182 46947	1351	1.0% 64.1 %	0.0330 [0.0070, 0.0589]	<u> </u>
Heterogeneity: Tau ² = 0.00	: Chi²= 653 14	. df = 59 (P < 0		1351 2 = 91%	U4. 170	0.0298 [0.0248, 0.0349]	*
Test for overall effect: Z = 1			,,				
0.0.0111-1-0							
6.6.3 High Quality Studies Aberg 2007	N 12207072	0.02476436	188	25	0.4%	0.1330 [0.0844, 0.1815]	
Catena 2012		0.02476436	188	4	1.2%	0.0221 [0.0007, 0.0435]	<u> </u>
Choudhry 2006	0.0555556	0.01125775	414	23	1.2%	0.0556 [0.0335, 0.0776]	
Fazio 2006		0.00344203	1701	35	2.0%	0.0206 [0.0138, 0.0273]	~
Grant 2008 Hayashi 2008		0.00259385 0.00692029	1581 144	17 1	2.1% 1.6%	0.0108 [0.0057, 0.0158] 0.0069 [-0.0066, 0.0205]	Ţ
Muffly 2012	0.00694444	0.00692029	3321	1 5	2.2%	0.0069 [-0.0066, 0.0205]	Ţ.
Parikh 2008		0.00061552	46798	845	2.2%	0.0181 [0.0168, 0.0193]	-
Saklani 2012	0.02416918	0.0084412	331	8	1.5%	0.0242 [0.0076, 0.0407]	_
Subtotal (95% CI) Heterogeneity: Tau ² = 0.00	· Chiz – 204 04	df = 9 /P ~ 0.0	54659	963	14.3%	0.0206 [0.0117, 0.0295]	•
Test for overall effect: Z = 4			3001), IT	- 50 70			
		-	4070		400.00	0.004445.0045.5.5.5	.
Total (95% CI)	· Obiz = 4450 0	e art = ne m	107669		100.0%	0.0244 [0.0210, 0.0279]	•
Heterogeneity: Tau ² = 0.00 Test for overall effect: Z = 1			0.00001)	1 = 83%	·v		-0.2 -0.1 0 0.1 0.2
Test for subgroup difference			.0003), [7	= 87.59	6		Incidence

1.6.2. Table of sensitivity analysis of the incidence of ASBO, impact of quality of studies

Study	Point estimate	95%CI
All available studies	0.0244	0.0210-0.0279
Low Quality studies only	0.0148	0.0094-0.0202
Intermediate Quality studies only	0.0298	0.0248-0.0349
High studies only	0.0206	0.0210-0.0279

1.7.1. Sensitivity analysis of the $\underset{N}{\text{incidence}}$ of ASBO, stratified by study design $\underset{\text{Incidence}}{\text{Incidence}}$

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	y unitary :	10 01 1111	N	ASBO	•• ••	Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
6.7.1 Retrospective Abasbassi 2011	0.02147230	0.00567679	652	14	1.8%	0.0215 [0.0103, 0.0326]	_
Aberg 2007		0.00307079	188	25	0.4%	0.1330 [0.0844, 0.1815]	
Abol-Enein 2001		0.00591705	238	2	1.7%	0.0084 [-0.0032, 0.0200]	 -
Adachi 1995	0.34782609		23	8	0.0%	0.3478 [0.1532, 0.5425]	-
Ahlberg 1997		0.00435544	721	10	1.9%	0.0139 [0.0053, 0.0224]	_
Amos 1996		0.02177456	78	3	0.5%	0.0385 [-0.0042, 0.0811]	
Arnold 2010		0.02374868 0.01066128	100 399	6 19	0.4%	0.0600 [0.0135, 0.1065]	
Bartels 2012 Beck 1999	0.04761903		18912	575	1.2% 2.2%	0.0476 [0.0267, 0.0685] 0.0304 [0.0280, 0.0329]	
Bissada 2004	0.03448276		29	1	0.2%	0.0345 [-0.0319, 0.1009]	+
Blachar 2002	0.01727862		463	8	1.7%	0.0173 [0.0054, 0.0291]	-
Capella 2006	0.03730273	0.00717792	697	26	1.6%	0.0373 [0.0232, 0.0514]	-
Champion 2003	0.00335008	0.0023649	597	2	2.1%	0.0034 [-0.0013, 0.0080]	•
Chang 2012		0.06708204	20	2	0.1%	0.1000 [-0.0315, 0.2315]	
Cho 2006 Choudhry 2006	0.00357143	0.00159434	1400 414	5 23	2.1% 1.2%	0.0036 [0.0004, 0.0067] 0.0556 [0.0335, 0.0776]	
Coran 1990	0.05555556	0.01125775 0.0255147	100	7	0.4%	0.0700 [0.0200, 0.1200]	
Dadan 1996		0.02409097	41	1	0.4%	0.0244 [-0.0228, 0.0716]	+-
Dasmahapatra 1991		0.03072065	45	2	0.3%	0.0444 [-0.0158, 0.1047]	+
Edna 1998	0.04449153	0.00949041	472	21	1.3%	0.0445 [0.0259, 0.0631]	-
El-Gohary 2010	0.04237288		118	5	0.6%	0.0424 [0.0060, 0.0787]	
Els 1993		0.01527743	181	8	0.8%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343 0.06883029	169 14	4	1.1%	0.0237 [0.0007, 0.0466]	
Fan 2001 Grant 2008		0.00059385	1581	17	0.1% 2.1%	0.0714 [-0.0635, 0.2063] 0.0108 [0.0057, 0.0158]	-
Gunabushanam 2009		0.00233333	835	11	2.0%	0.0132 [0.0054, 0.0209]	-
Guru 2010		0.03771464	26	1	0.2%	0.0385 [-0.0355, 0.1124]	+-
Ha 2008	0.10526316	0.0704059	19	2	0.1%	0.1053 [-0.0327, 0.2433]	+
Hernandez-Richter 1999	0.00413223		726	3	2.1%	0.0041 [-0.0005, 0.0088]	<u> </u>
Hwang 2004	0.01020408		1372	14	2.1%	0.0102 [0.0049, 0.0155]	-
Jeong 2008		0.00412017	2586	119	1.9%	0.0460 [0.0379, 0.0541]	
Kawamura 2010		0.01839535	182	12	0.6%	0.0659 [0.0299, 0.1020] 0.0391 [0.0174, 0.0608]	
Kehoe 2009 Leung 2009		0.01106099 0.00250247	307 1777	12 20	1.2% 2.1%	0.0113 [0.0064, 0.0162]	_
Lin 1995	0.07407407		54	4	0.2%	0.0741 [0.0042, 0.1439]	
MacLean 2002		0.00732706	1082	67	1.6%	0.0619 [0.0476, 0.0763]	_
Mais 1998		0.03148648	95	10	0.3%	0.1053 [0.0436, 0.1670]	
Menzies 1990		0.00264728	1913	26	2.1%	0.0136 [0.0084, 0.0188]	-
Miyashiro 2010		0.00332354	847	8	2.0%	0.0094 [0.0029, 0.0160]	
Montz 1994		0.02421756	98	6	0.4%	0.0612 [0.0138, 0.1087]	
Muffly 2012	0.00150557	0.0006728	3321	5	2.2%	0.0015 [0.0002, 0.0028]	
Murphy 2006 Nieuwenhuijzen 1998		0.04154492 0.02121724	46 234	4 28	0.2% 0.5%	0.0870 [0.0055, 0.1684] 0.1197 [0.0781, 0.1612]	
Nour 1996		0.02121724	138	14	0.4%	0.1014 [0.0511, 0.1518]	
Parakh 2007		0.00684882	290	4	1.6%	0.0138 [0.0004, 0.0272]	-
Parikh 2008		0.00061552	46798	845	2.2%	0.0181 [0.0168, 0.0193]	
Ragni 1996	0.02173913	0.02150154	46	1	0.5%	0.0217 [-0.0204, 0.0639]	+-
Rempen 1995		0.00956905	104	1	1.3%	0.0096 [-0.0091, 0.0284]	+
Ritchey 1993		0.00519189	1910	104	1.8%	0.0545 [0.0443, 0.0646]	[~
Rogula 2007 Rosen 2009		0.00111596 0.00913213	3463 109	15 1	2.2% 1.4%	0.0043 [0.0021, 0.0065] 0.0092 [-0.0087, 0.0271]	_
Ryan 2004		0.00313213	583	21	1.5%	0.0360 [0.0209, 0.0511]	-
Sai 2007		0.04606423	36	3	0.1%	0.0833 [-0.0070, 0.1736]	
Saklani 2012	0.02416918	0.0084412	331	8	1.5%	0.0242 [0.0076, 0.0407]	
Salum 2001	0.02511416	0.00747651	438	11	1.6%	0.0251 [0.0105, 0.0398]	-
Scholin 2011		0.00547824	786	19	1.8%	0.0242 [0.0134, 0.0349]	-
Sowande 2011		0.02984036	33	1	0.3%	0.0303 [-0.0282, 0.0888]	
Stanton 2010 Tashjian 2007	0.01293103	0.00741731	232 22	3 1	1.6% 0.1%	0.0129 [-0.0016, 0.0275] 0.0455 [-0.0416, 0.1325]	
Taylor 2006		0.00500775	444	5	1.9%	0.0113 [0.0014, 0.0211]	_
Taylor 2010	0.02189781		411	9	1.6%	0.0219 [0.0077, 0.0360]	-
Tsao 2007		0.00238675	1105	7	2.1%	0.0063 [0.0017, 0.0110]	-
van Eijck 2008	0.15646259	0.02996393	147	23	0.3%	0.1565 [0.0977, 0.2152]	
Varkarakis 2007		0.00876835	434	15	1.4%	0.0346 [0.0174, 0.0517]	-
Wakhlu 2000		0.01963595	71	2	0.6%	0.0282 [-0.0103, 0.0667]	<u> </u>
Wakhlu 2009 Wana 1999		0.01017339 0.01705872	138	2	1.3%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634]	
Wang 1999 Wang 2005		0.01705872	100 152		0.7% 1.4%	0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313]	
Yamataka 1997		0.00324202	240	5	1.4%	0.0208 [0.0028, 0.0389]	
Zbar 1993		0.01323503	182	6	1.0%	0.0330 [0.0070, 0.0589]	-
Subtotal (95% CI)			101915	2278	81.5%	0.0253 [0.0215, 0.0292]	•
Heterogeneity: Tau ² = 0.00			0.00001)	; I² = 949	%		
Test for overall effect: $Z = 1$	2.88 (P < 0.000	001)					
6.7.2 Dragnostino							
6.7.2 Prospective	0.06363460	0.05122702	10	- 1	0.100	0.052610.0470.045201	
Alexakis 2003 Atiq 1993		0.05122782 0.06761234	19 35	1 7	0.1%	0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325]	-
Cabot 2010		0.00375932	530	4	2.0%	0.0075 [0.0002, 0.0149]	-
Catena 2012		0.01092695	181	4	1.2%	0.0221 [0.0007, 0.0435]	
Chin 2007		0.00516791	193	1		0.0052 [-0.0049, 0.0153]	+
Eshuis 2010		0.01801577	55	1	0.7%	0.0182 [-0.0171, 0.0535]	+
Fazio 2006		0.00344203	1701	35	2.0%	0.0206 [0.0138, 0.0273]	-
Hayashi 2008		0.00692029	144	1	1.6%	0.0069 [-0.0066, 0.0205]	Ť
Lee 2012		0.00329179	1002	11	2.0%	0.0110 [0.0045, 0.0174]	
Lumley 2002 Majewski 2005		0.01428226 0.01755047	154 157	5 8	0.9% 0.7%	0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854]	
Nelson 2006		0.00335958	784	7	2.0%	0.0089 [0.0023, 0.0155]	-
Ng 2009		0.01485116	148	5	0.9%	0.0338 [0.0047, 0.0629]	
Pace 2002		0.10006825	13	2	0.0%	0.1538 [-0.0423, 0.3500]	+
Rosin 2007	0.02287582	0.00854678	306	7	1.4%	0.0229 [0.0061, 0.0396]	-
Sileri 2008		0.01817361	276	28	0.7%	0.1014 [0.0658, 0.1371]	
Talwar 1997	0.03571429	0.02479875	56	420	0.4%	0.0357 [-0.0129, 0.0843]	
Subtotal (95% CI)	- ONE - 57.10	MF_ 40 (D + 0.5	5754	129	18.5%	0.0200 [0.0126, 0.0274]	*
Heterogeneity: $Tau^2 = 0.00$ Test for overall effect: $Z = 5$			ייטטעד); l²	= 72%			
reactor overall effect. Z = 3	(F ~ 0.0001	/1/					
Total (95% CI)			107669	2407	100.0%	0.0244 [0.0210, 0.0279]	
Heterogeneity: Tau ² = 0.00						•	-0.2 -0.1 0 0.1 0
Test for overall effect: $Z = 1$	3.90 (P < 0.000	001)					-0.2 -0.1 U 0.1 U Incidence
Test for subgroup different			21), l² = 3	37.3%			andidence

1.7.2. Table of sensitivity analysis of the incidence of ASBO, impact of study design

Study	Point estimate	95%CI
All available studies	0.0244	0.0210-0.0279
Retrospective studies only	0.0253	0.0215-0.0292
Prospective studies only	0.0200	0.0126-0.0274

1.8.1. Sensitivity analysis of the incidence of ASBO, stratified by publication date

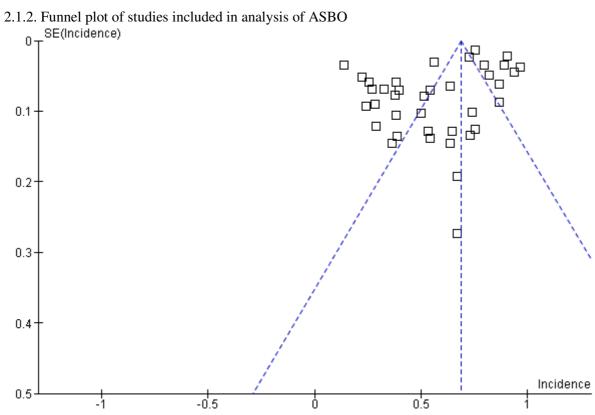
Subspace Subspace	1.8.1. Sensitivit	y anaiys	is of the		IGETIC ASBO	e or	ASDO, Stratti	lncidence
Asabri 1986						Weight		
Abberg 1987		_		22		0.000	0.0470 (0.4500 0.5405)	
Arron 1998								_
Age 1993								
Count 1996							0.2000 [0.0675, 0.3325]	
Death 1998 0.0249024 0.0229027 41 1 0.74 0.0244 0.0250, 0.0178								<u></u>
Description								
Design D								+
Hearmannes-Richter 1999								—
In 1995								
Mars 1989								
Menders 1990								
Neuron Housen 1898	Menzies 1990	0.01359122	0.00264728	1913	26			-
Nour 1986								
Repring 1998								
Remiper 1995								
Talward 1997	=							 -
Vannatisa 1997	Ritchey 1993	0.05445026	0.00519189	1910	104	1.8%		-
Variables 1997 0.0209333 0.0029333 0.0029339 0.022939 0.123500 0.02360 0.002360								
Examinagementy Taur's = 0.00, Cherry = 222.41, eff = 23 (Pr < 0.000011) F = 0.000 6.42. Study published in the year 2000 and tract Taur's = 0.00, 1 (1.000 published in the year 2000 and tract Taur's = 0.00 (1.000 published in the year 2000 and tract Taur's = 0.0000 published in the year 2000 and tract Taur's = 0.000 published								
Methodopening Tur" = 0.00, Chir" = 222.41, dr = 23.9° < 0.00001) F = 30.0° Test for overal effect Z = 7.73 0° < 0.000001 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000001 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.000011 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z = 7.73 0° < 0.000001 Test for overal effect Z = 7.73 0° < 0.00001 Test for overal effect Z								
Common		0.00200100	0.01020000					♦
Caption Capt	Heterogeneity: Tau ² = 0.00	; Chi ² = 222.41	, df= 23 (P < 0.	00001); I	² = 90%			
Apachesis 2011	Test for overall effect: Z = 7	.73 (P < 0.000)	01)					
Apachesis 2011	6.8.2 Study published in th	ie year 2000 a	nd later					
Abochemia 2001				652	14	1.8%	0.0215 [0.0103, 0.0326]	
Alexander 2003								
Bardels 2012								
Bardes 2012								
Blashara 2004								_
Blachez 2002								+
Capenal 2012								-
Catene 2012								-
Changion 2003								-
China 2007								_
Chin 2007								
Cho 2006								+
El-Chonay 2010		0.00357143	0.00159434	1400	5	2.1%		•
Eschar 2001								_
Eshibit 2010								
Fani 2006								
Fairo 2008								
Gunz 2010 0.01317365 0.003946154 0.03747164 26 1 0.2% 0.0132 [0.0054, 0.0209]								-
Guru 2010								-
Ha 2008								
Haysah 2008								
Hydrog 2004								+
Kehoe 2009								-
Lee 2012	-							-
Leung 2009								
Lumley 2002								_
Lumiley 2002								-
Majewski 2005 0.05095541 0.0175047 157 8 0.7% 0.0510 [0.0166, 0.084] — Mmysshiro 2010 0.0094451 0.00332354 847 8 2.0% 0.0094 [0.0029, 0.0028] — Murfhy 2012 0.00150557 0.0008728 3321 5 2.2% 0.0015 [0.0002, 0.0028] — Murphy 2006 0.08895652 0.015454492 46 4 0.2% 0.0870 [0.0055, 0.1684] — Ng 2009 0.03378378 0.01485116 148 5 0.9% 0.0338 [0.0047, 0.0629] — Parakh 2007 0.0137931 0.0068882 290 4 1.6% 0.0138 [0.0040, 0.0272] — Parikh 2008 0.01805633 0.0061552 46788 845 2.2% 0.0181 [0.0168, 0.0193] . Rosen 2009 0.00917431 0.00913213 109 1 1.4% 0.0022 [0.0081, 0.036] — Ryan 2004 0.03602086 0.00771747 563 2 1.5% 0.022 [0.0081, 0.036] —								
Mummy 2012								_
Murphy 2012								
Murphy 2006	,							
Neison 2006								
Pace 2002								-
Parakh 2007								
Parikh 2008								
Rogula 2007								-
Rosen 2009								
Ryan 2004	Rosen 2009							+
Sai 2007								-
Saklani 2012								
Salum 2001								_
Scholin 2011								-
Sowande 2011								-
Stanton 2010								
Tashjian 2007								
Taylor 2006								
Taylor 2010								-
Tsao 2007	•				9			
Varkarakis 2007							0.0063 [0.0017, 0.0110]	ŀ
Wakhlu 2000								
Wakhlu 2009								<u></u>
Wang 2005								 -
Subtotal (95% CI) 81165 1552 78.9% 0.0211 [0.0176, 0.0245] Heterogeneity: Tau ² = 0.00; Chi ² = 734.50, df = 62 (P < 0.00001); if = 92% Total (95% CI) 107669 2407 100.0% 0.0244 [0.0210, 0.0279] Heterogeneity: Tau ² = 0.00; Chi ² = 1150.66, df = 86 (P < 0.00001); if = 93% Total (95% CI) 0.01 0.0244 [0.0210, 0.0279] Test for overall effect Z = 13.90 (P < 0.00001)								 -
Test for overall effect: Z = 11.81 (P < 0.00001) Total (95% CI) Heterogeneity: Tau* = 0.00; Chi* = 1150.66, df = 86 (P < 0.00001); I* = 93% Test for overall effect: Z = 13.90 (P < 0.00001) Test for overall effect: Z = 13.90 (P < 0.00001)	Subtotal (95% CI)			81165				[1
Total (95% CI)				00001); I	P= 92%			
Heterogeneity: Tau* = 0.00; Chi* = 1150.66, df = 86 (P < 0.00001); I* = 93% Test for overall effect: Z = 13.90 (P < 0.00001)	restror overall effect: Z = 1	1.81 (P < 0.00)	JUT)					
Test for overall effect: Z = 13.90 (P < 0.00001) -0.2 -0.1 0.1 0.2 Incidence							0.0244 [0.0210, 0.0279]	
Test for overall effect: Z = 13.90 (P < 0.00001)				0.00001);	I² = 939	6		-0.2 -0.1 0 0.1 0.2
Test for subgroup diliteratives. Cit. = 10.00, di = 1 (F = 0.002), F = 30.1%				000/12	- 00 4 00			
	rearior aundingh miletetit	,05. OIII – 10.U	,0, u1 – 1 (F – U	.502), 1 =	- 30.170			

1.8.2. Table of sensitivity analysis of the incidence of ASBO, impact of publication date

Study	Point estimate	95%CI
All available studies	0.0244	0.0210-0.0279
Studies published before the year 2000 only	0.0374	0.0279-0.0469
Studies published in the year 2000 and later only	0.0211	0.0210-0.0279

2.1.1 Forest Plot of the cross sectional incidence of ASBO, including all studies Experimental Control Incidence

			Experimental (Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Abasbassi 2011		0.05237828	63	14	2.8%	0.22 [0.12, 0.32]	_
Aberg 2007	0.96153846	0.03771464	26	25	2.9%	0.96 [0.89, 1.04]	_
Adachi 1995	1	0	8	8		Not estimable	
Atiq 1993	0.63636364	0.14504073	11	7	2.1%	0.64 [0.35, 0.92]	
3lachar 2001	0.39583333	0.07058525	48	19	2.7%	0.40 [0.26, 0.53]	
Blachar 2002	0.38095238	0.10597117	21	8	2.5%	0.38 [0.17, 0.59]	
Cabot 2010	0.28571429	0.12073632	14	4	2.3%	0.29 [0.05, 0.52]	
Capella 2006	0.38235294	0.05893156	68	26	2.8%	0.38 [0.27, 0.50]	-
Champion 2003	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
Chen 1999	1	0	34	34		Not estimable	
Cho 2006	0.23809524	0.09294286	21	5	2.6%	0.24 [0.06, 0.42]	
Chou 2005	0.90340909	0.02226661	176	159	3.0%	0.90 [0.86, 0.95]	_
Cox 1993	0.81967213	0.0492251	61	50	2.9%	0.82 [0.72, 0.92]	_
Dasmahapatra 1991	0.66666667	0.27216553	3	2	1.2%	0.67 [0.13, 1.20]	-
Ouron 2008	0.5	0.10206207	24	12	2.5%	0.50 [0.30, 0.70]	
Edna 1998	0.51219512	0.07806365	41	21	2.7%	0.51 [0.36, 0.67]	
Els 1993	0.53333333	0.12881224	15	8	2.3%	0.53 [0.28, 0.79]	
azio 2006	0.63636364	0.06486419	55	35	2.8%	0.64 [0.51, 0.76]	
Gunabushanam 2009	0.26829268	0.06919603	41	11	2.7%	0.27 [0.13, 0.40]	
Husain 2007	0.1372549	0.03407259	102	14	2.9%	0.14 [0.07, 0.20]	-
lwang 2004		0.05873702	55	14	2.8%	0.25 [0.14, 0.37]	-
Johanet 1999		0.02287156	380	276	3.0%	0.73 [0.68, 0.77]	-
Clausner 1995	0.64285714		14	9	2.3%	0.64 [0.39, 0.89]	
_o 2007		0.03017346	271	151	2.9%	0.56 [0.50, 0.62]	_
MacLean 2002		0.03532771	80	71	2.9%	0.89 [0.82, 0.96]	-
Miller 2002		0.06206329	30	26	2.8%	0.87 [0.75, 0.99]	
Miyashiro 2010		0.13428163	11	8	2.2%	0.73 [0.46, 0.99]	
Murphy 2006		0.19245009	6	4	1.8%	0.67 [0.29, 1.04]	
Velson 2006		0.08979978	25	7	2.6%	0.28 [0.10, 0.46]	
Olver 1990		0.07048404	50	27	2.7%	0.54 [0.40, 0.68]	
Parakh 2007		0.14504073	11	4	2.1%	0.36 [0.08, 0.65]	
Parent 1995		0.04412365	31	29	2.9%	0.94 [0.85, 1.02]	_
Parikh 2008		0.01289656	1126	845	3.0%	0.75 [0.73, 0.78]	_
Ritchey 1993		0.03534204	131	104	2.9%	0.79 [0.72, 0.86]	_
Rogula 2007		0.07654655	40	15	2.7%	0.38 [0.22, 0.53]	
Rosin 2000		0.10102262	19	14	2.5%	0.74 [0.54, 0.93]	
Rosin 2007		0.13826416	13	7	2.2%	0.54 [0.27, 0.81]	
Suzuki 2003		0.08777075	15	13	2.6%	0.87 [0.69, 1.04]	
Taylor 2006	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
raylor 2000 ran Eijck 2008	0.30401330	0.134832	23	23	2.270	Not estimable	
/arkarakis 2007	0.32608696	0.06911777	46	15	2.7%	0.33 [0.19, 0.46]	
/amataka 1997	0.32000030	0.00911777	12	9	2.7%	0.75 [0.51, 0.99]	
otal (95% CI)			3247	21/12	100.0%	0.56 [0.49, 0.64]	_
otal (35% CI)			JZ41	Z 14J	100.070	0.30 [0.43, 0.04]	



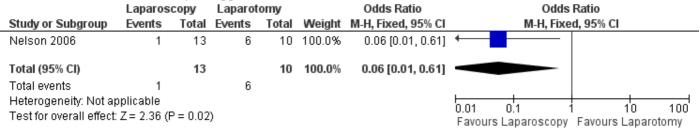
2.2.1 Forest Plot of the cross sectional incidence of ASBO, stratified by anatomical location Experimental Control Incidence Inc

	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
2.1 General surgery							
hen 1999	1	0	34	34		Not estimable	
Chou 2005	0.90340909	0.02226661	176	159	3.0%	0.90 [0.86, 0.95]	-
Cox 1993	0.81967213	0.0492251	61	50	2.9%	0.82 [0.72, 0.92]	_
Ouron 2000		0.10206207	24	12	2.5%	0.50 [0.30, 0.70]	
Johanet 1999		0.02287156	380	276	3.0%	0.73 [0.68, 0.77]	_
Clausner 1995		0.12806021	14	9	2.3%	0.64 [0.39, 0.89]	
_0 2007		0.03017346	271	151	2.9%	0.56 [0.50, 0.62]	-
Miller 2002		0.06206329	30	26	2.8%	0.87 [0.75, 0.99]	
Parent 1995		0.04412365	31	29	2.9%	0.94 [0.85, 1.02]	-
Rosin 2000		0.10102262	19	14	2.5%	0.74 [0.54, 0.93]	
Buzuki 2003	0.86666667	0.08777075	15	13	2.6%	0.87 [0.69, 1.04]	
Subtotal (95% CI) Heterogeneity: Tau² = 0			1055 0.00001); l² = 92	773 %	27.2%	0.76 [0.67, 0.86]	_
est for overall effect: Z	•	00001)					
.2.2 Upper GI surgery basbassi 2011		0.05237828	63	14	2.8%	0.22 [0.12, 0.32]	
Adachi 1995	1	0.00237020	8	8	2.070	Not estimable	
Atiq 1993		0.14504073	11	7	2.1%	0.64 [0.35, 0.92]	
Riiq 1993 Blachar 2002		0.14504073	21	8	2.1%	0.38 [0.17, 0.59]	
Capella 2006		0.05893156	68	26	2.8%	0.38 [0.27, 0.50]	—
Champion 2003	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
Cho 2006		0.09294286	21	5	2.6%	0.24 [0.06, 0.42]	
Gunabushanam 2009		0.06919603	41	11	2.7%	0.27 [0.13, 0.40]	—
Husain 2007		0.03407259	102	14	2.9%	0.14 [0.07, 0.20]	-
Hwang 2004		0.05873702	55	14	2.8%	0.25 [0.14, 0.37]	
Miyashiro 2010		0.13428163	11	8	2.2%	0.73 [0.46, 0.99]	
Velson 2006		0.08979978	25	7	2.6%	0.28 [0.10, 0.46]	
Parakh 2007		0.14504073	11	4	2.1%	0.36 [0.08, 0.65]	
Rogula 2007		0.07654655	40	15	2.7%	0.38 [0.22, 0.53]	
aylor 2006	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
Subtotal (95% CI)	·	· 	503	151	35.3%	0.33 [0.25, 0.40]	◆
est for overall effect: Z	•	3001)					
Aberg 2007	0.96153846	0.03771464	26	25	2.9%	0.96 [0.89, 1.04]	-
I.2.3 Lower GI surgery Aberg 2007 Cabot 2010	0.96153846 0.28571429	0.12073632	14	4	2.3%	0.29 [0.05, 0.52]	
Aberg 2007 Cabot 2010 Casmahapatra 1991	0.96153846 0.28571429 0.66666667	0.12073632 0.27216553	1 4 3	4 2	2.3% 1.2%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998	0.96153846 0.28571429 0.66666667 0.51219512	0.12073632 0.27216553 0.07806365	14 3 41	4 2 21	2.3% 1.2% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333	0.12073632 0.27216553 0.07806365 0.12881224	14 3 41 15	4 2 21 8	2.3% 1.2% 2.7% 2.3%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79]	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419	14 3 41 15 55	4 2 21 8 35	2.3% 1.2% 2.7% 2.3% 2.8%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76]	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771	14 3 41 15 55 80	4 2 21 8 35 71	2.3% 1.2% 2.7% 2.3% 2.8% 2.9%	0.29 (0.05, 0.52) 0.67 (0.13, 1.20) 0.51 (0.36, 0.67) 0.53 (0.28, 0.79) 0.64 (0.51, 0.76) 0.89 (0.82, 0.96)	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404	14 3 41 15 55 80 50	4 2 21 8 35 71 27	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7%	0.29 (0.05, 0.52) 0.67 (0.13, 1.20) 0.51 (0.36, 0.67) 0.53 (0.28, 0.79) 0.64 (0.51, 0.76) 0.89 (0.82, 0.96) 0.54 (0.40, 0.68)	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656	14 3 41 15 55 80 50 1126	4 2 21 8 35 71 27 845	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78]	
oberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Gazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404	14 3 41 15 55 80 50 1126 13	4 2 21 8 35 71 27 845	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0% 2.2%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81]	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416	14 3 41 15 55 80 50 1126 13 1423	4 2 21 8 35 71 27 845 7	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78]	
Aberg 2007 Cabot 2010 Dasmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001)	14 3 41 15 55 80 50 1126 13 1423	4 2 21 8 35 71 27 845 7	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0% 2.2%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Carikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001)	14 3 41 15 55 80 50 1126 13 1423	4 2 21 8 35 71 27 845 7 1045	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0% 2.2% 25.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81] 0.66 [0.56, 0.77]	——————————————————————————————————————
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Blachar 2001 (amataka 1997	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001)	14 3 41 15 55 80 50 1126 13 1423 00001); *= 909	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.3% 2.8% 2.7% 3.0% 2.2% 25.0%	0.29 (0.05, 0.52) 0.67 (0.13, 1.20) 0.51 (0.36, 0.67) 0.53 (0.28, 0.79) 0.64 (0.51, 0.76) 0.89 (0.82, 0.96) 0.54 (0.40, 0.68) 0.75 (0.73, 0.78) 0.66 (0.56, 0.77)	
sberg 2007 Cabot 2010 Casmahapatra 1991 Cana 1998 Cls 1993 Cazio 2006 ClacLean 2002 Carikh 2008 Cosin 2007 Cubtotal (95% CI) Heterogeneity: Tau² = 0 Cest for overall effect: Z L.2.4 hepato-biliairy and Camataka 1997 Cubtotal (95% CI)	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.6) d pancreatic si 0.39583333 0.75	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125	14 3 41 15 55 80 50 1126 13 1423 00001); *= 909	4 2 21 8 35 71 27 845 7 1045	2.3% 1.2% 2.7% 2.3% 2.8% 2.9% 2.7% 3.0% 2.2% 25.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81] 0.66 [0.56, 0.77]	
sberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Over 1990 Parikh 2008 Rosin 2007 Foubtotal (95% CI) Heterogeneity: Tau² = 0 Cest for overall effect: Z L.2.4 hepato-biliairy and Glachar 2001 Camataka 1997 Foubtotal (95% CI) Heterogeneity: Tau² = 0 Control (95% CI) Heterogeneity: Tau² = 0	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic si 0.39583333 0.75	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0	14 3 41 15 55 80 50 1126 13 1423 00001); *= 909	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.3% 2.8% 2.7% 3.0% 2.2% 25.0%	0.29 (0.05, 0.52) 0.67 (0.13, 1.20) 0.51 (0.36, 0.67) 0.53 (0.28, 0.79) 0.64 (0.51, 0.76) 0.89 (0.82, 0.96) 0.54 (0.40, 0.68) 0.75 (0.73, 0.78) 0.66 (0.56, 0.77)	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Slachar 2001 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic st 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002)	14 3 41 15 55 80 50 1126 13 1423 000001); IF = 909 48 12 60 11); IF = 84%	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.5.0%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.27, 0.81] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Colver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fast for overall effect: Z L2.4 hepato-biliairy and Gamataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z L2.7 urological surgery Varkarakis 2007	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic st 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0	14 3 41 15 56 80 50 1126 13 1423 00001); I ² = 909 48 12 60	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.3% 5.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.56 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Gamataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgeny Farkarakis 2007 Subtotal (95% CI)	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic st 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002)	14 3 41 15 55 80 50 1126 13 1423 000001); IF = 909 48 12 60 11); IF = 84%	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.5.0%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.27, 0.81] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
sberg 2007 Cabot 2010 Casmahapatra 1991 Cana 1998 Cls 1993 Casin 2006 MacLean 2002 Cheen 2007 Carikh 2008 Rosin 2007 Cathoda (95% CI) Cast for overall effect: Z	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic st 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777	14 3 41 15 56 80 50 1126 13 1423 00001); I ² = 909 48 12 60	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.3% 5.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.56 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
sberg 2007 cabot 2010 casmahapatra 1991 cdna 1998 clis 1993 azio 2006 dacLean 2002 cliver 1990 carikh 2008 carikh 2008 cosin 2007 cubtotal (95% CI) deterogeneity: Tau² = 0 cest for overall effect: Z c.4. hepato-biliairy and cliachar 2001 camataka 1997 cubtotal (95% CI) deterogeneity: Tau² = 0 cest for overall effect: Z c.7. urological surgen carkarakis 2007 cubtotal (95% CI) deterogeneity: Not appl cest for overall effect: Z	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic si 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777	14 3 41 15 56 80 50 1126 13 1423 00001); I ² = 909 48 12 60	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.3% 5.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.56 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
sberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Blachar 2001 Famataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgen Farkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.8 pediatric surgery	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic su 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777	14 3 41 15 56 80 50 1126 13 1423 00001); I ² = 909 48 12 60	4 2 21 8 35 71 27 845 7 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.3% 5.0%	0.29 (0.05, 0.52) 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.56 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90]	
sberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Carikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z L2.4 hepato-biliairy and Blachar 2001 Famataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z L2.7 urological surgen Farkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z L2.8 pediatric surgery Murphy 2006	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic su 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777	14 3 41 15 55 80 50 1126 13 1423 00001); = 909 48 12 60 11); = 84%	4 2 21 8 35 71 27 845 1045 6	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 2.2% 2.5.0% 2.7% 2.7% 2.7% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Salachar 2001 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgeny (arkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.8 pediatric surgery Murphy 2006 Ritchey 1993 Van Eijck 2008	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic su 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777	14 3 41 15 55 80 50 1126 13 1423 00001); IF = 909 48 12 60 11); IF = 84% 46 46 46	4 2 21 8 35 71 27 845 7 1045 6 15 15 15	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.7% 2.7% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46] 0.33 [0.19, 0.46] 0.67 [0.29, 1.04] 0.79 [0.72, 0.86] Not estimable	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Gamataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgeny /arkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.8 pediatric surgery Murphy 2006 Ritchey 1993 Fan Eijck 2008 Subtotal (95% CI)	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.544405 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic si 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00 0.79389313 1	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.00001) 0.06911777 0001) 0.19245009 0.03534204 0	14 3 41 15 56 80 50 1126 13 1423 00001); IF = 909 48 12 60 11); IF = 84% 46 46 46	4 2 21 8 35 71 27 845 7 1045 6 15 15 15	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.2% 2.5.0% 2.7% 2.7% 2.7% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46] 0.33 [0.19, 0.46] 0.37 [0.29, 1.04] 0.79 [0.72, 0.86]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Carikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Blachar 2001 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgery (arkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.7 urological surgery (arkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.8 pediatric surgery Murphy 2006 Ritchey 1993	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.544405 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic si 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.00001) 0.06911777 0001) 0.19245009 0.03534204 0 , df = 1 (P = 0.5	14 3 41 15 56 80 50 1126 13 1423 00001); IF = 909 48 12 60 11); IF = 84% 46 46 46	4 2 21 8 35 71 27 845 7 1045 6 15 15 15	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.7% 2.7% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46] 0.33 [0.19, 0.46] 0.67 [0.29, 1.04] 0.79 [0.72, 0.86] Not estimable	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Colver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Blachar 2001 Fest for overall effect: Z I.2.5 urological surgery Farkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.6 pediatric surgery Murphy 2006 Fisch 2008 Fisch	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.544405 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic si 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.00001) 0.06911777 0001) 0.19245009 0.03534204 0 , df = 1 (P = 0.5	14 3 41 15 56 80 50 1126 13 1423 00001); IF = 909 48 12 60 11); IF = 84% 46 46 46	4 2 21 8 35 71 27 845 7 1045 6 15 15 15 15 15 15 15 15 15 15 15 15 15	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 2.50% 2.7% 2.7% 2.7% 2.7% 4.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.54 [0.27, 0.81] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46] 0.33 [0.19, 0.46] 0.79 [0.72, 0.86] Not estimable 0.79 [0.72, 0.86]	
Aberg 2007 Cabot 2010 Casmahapatra 1991 Edna 1998 Els 1993 Fazio 2006 MacLean 2002 Diver 1990 Parikh 2008 Rosin 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.4 hepato-biliairy and Gamataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0 Fest for overall effect: Z I.2.7 urological surgeny /arkarakis 2007 Subtotal (95% CI) Heterogeneity: Not appl Fest for overall effect: Z I.2.8 pediatric surgery Murphy 2006 Ritchey 1993 Fan Eijck 2008 Subtotal (95% CI) Heterogeneity: Tau² = 0 Heterogeneity: Tau² = 0	0.96153846 0.28571429 0.66666667 0.51219512 0.53333333 0.63636364 0.8875 0.54 0.75044405 0.53846154 .02; Chi² = 86.7 = 12.37 (P < 0.0 d pancreatic st 0.39583333 0.75 .05; Chi² = 6.09 = 3.16 (P = 0.00 y 0.32608696 licable = 4.72 (P < 0.00 0.666666667 0.79389313 1 .00; Chi² = 0.42 = 22.72 (P < 0.00	0.12073632 0.27216553 0.07806365 0.12881224 0.06486419 0.03532771 0.07048404 0.01289656 0.13826416 7, df = 9 (P < 0.00001) urgery 0.07058525 0.125 , df = 1 (P = 0.0002) 0.06911777 0001) 0.19245009 0.03534204 0 , df = 1 (P = 0.500001)	14 3 41 15 55 80 50 1126 13 1423 00001); = 909 48 12 60 11); = 84% 46 46 46 131 23 160 12); = 0%	4 2 21 8 35 71 27 845 6 7 1045 6 15 15 15 15 2143	2.3% 1.2% 2.7% 2.8% 2.9% 2.7% 3.0% 2.5.0% 2.7% 2.7% 2.7% 2.7%	0.29 [0.05, 0.52] 0.67 [0.13, 1.20] 0.51 [0.36, 0.67] 0.53 [0.28, 0.79] 0.64 [0.51, 0.76] 0.89 [0.82, 0.96] 0.54 [0.40, 0.68] 0.75 [0.73, 0.78] 0.66 [0.56, 0.77] 0.40 [0.26, 0.53] 0.75 [0.51, 0.99] 0.56 [0.21, 0.90] 0.33 [0.19, 0.46] 0.33 [0.19, 0.46] 0.67 [0.29, 1.04] 0.79 [0.72, 0.86] Not estimable	-1 -0.5 0 0.5

2.3.1. Forest plot of the cross sectional incidence of ASBO, stratified by surgical technique 6 studies excluded. Surgical technique not specified in 6 studies.

	C	1	Experimental	Control		Incidence	Incidence
Study or Subgroup	Incidence	SE	•		Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.3.1 Laparotomy							
Aberg 2007	0.96153846	0.03771464	26	25	3.2%	0.96 [0.89, 1.04]	-
Adachi 1995	1	0	8	8		Not estimable	
Atiq 1993	0.63636364	0.14504073	11	7	2.5%	0.64 [0.35, 0.92]	
Blachar 2001	0.39583333	0.07058525	48	19	3.0%	0.40 [0.26, 0.53]	
Chou 2005	0.90340909	0.02226661	176			0.90 [0.86, 0.95]	-
Cox 1993	0.81967213	0.0492251	61	50	3.1%	0.82 [0.72, 0.92]	_
Dasmahapatra 1991	0.66666667	0.27216553	3	2	1.7%	0.67 [0.13, 1.20]	
Edna 1998	0.51219512	0.07806365	41	21	3.0%	0.51 [0.36, 0.67]	
Els 1993	0.53333333	0.12881224	15	8	2.7%	0.53 [0.28, 0.79]	
Fazio 2006	0.63636364	0.06486419	55	35	3.1%	0.64 [0.51, 0.76]	
Johanet 1999	0.72631579	0.02287156	380	276	3.2%	0.73 [0.68, 0.77]	-
Klausner 1995	0.64285714	0.12806021	14	9	2.7%	0.64 [0.39, 0.89]	
Miller 2002	0.86666667	0.06206329	30	26	3.1%	0.87 [0.75, 0.99]	
Murphy 2006	0.66666667	0.19245009	6	4	2.2%	0.67 [0.29, 1.04]	
Nelson 2006	0.6	0.15491933	10	6		0.60 [0.30, 0.90]	
Olver 1990	0.54	0.07048404	50	27	3.0%	0.54 [0.40, 0.68]	
Ritchey 1993	0.79389313	0.03534204	131	104	3.2%	0.79 [0.72, 0.86]	-
Rosin 2000	0.73684211	0.10102262				0.74 [0.54, 0.93]	
Buzuki 2003	0.86666667	0.08777075	15	13	2.9%	0.87 [0.69, 1.04]	
Faylor 2006	0.38461538	0.134932	13			0.38 [0.12, 0.65]	
an Eijck 2008	1	0				Not estimable	
Subtotal (95% CI)			1135		53.7%	0.70 [0.63, 0.78]	•
I.3.2 Laparoscopy	0 2222222	0.05227020	ຂວ	1.4	2.10	0.2210.42.0.221	
Abasbassi 2011		0.05237828				0.22 [0.12, 0.32]	
Blachar 2002		0.10597117				0.38 [0.17, 0.59]	
Cabot 2010		0.12073632			2.7%	0.29 [0.05, 0.52]	
Capella 2006		0.05893156				0.38 [0.27, 0.50]	
Champion 2003	0.38461538	0.134932				0.38 [0.12, 0.65]	
Cho 2006		0.09294286				0.24 [0.06, 0.42]	
Duron 2000		0.10206207				0.50 [0.30, 0.70]	
Gunabushanam 2009		0.06919603				0.27 [0.13, 0.40]	
Husain 2007		0.03407259				0.14 [0.07, 0.20]	
Hwang 2004		0.05873702				0.25 [0.14, 0.37]	
Miyashiro 2010		0.13428163				0.73 [0.46, 0.99]	
Nelson 2006	0.07692308	0.0739053				0.08 [-0.07, 0.22]	T
Parakh 2007 Parent 1995		0.14504073				0.36 [0.08, 0.65]	
		0.04412365 0.07654655				0.94 [0.85, 1.02]	
Rogula 2007						0.38 [0.22, 0.53]	
Rosin 2007 Subtotal (95% CI)	0.53846154	0.13826416	13 541			0.54 [0.27, 0.81] 0.38 [0.23, 0.52]	•
Heterogeneity: Tau² = 0.1	08: Chi²= 252	76. df = 15./P					•
Test for overall effect: Z =			3.00001/,1 =	- 1 /0			
Total (95% CI)			1676	1017	100.0%	0.54 [0.44, 0.64]	•
Heterogeneity: Tau² = 0.1	08; Chi² = 830.	26. df = 34 (P	< 0.00001): I ² =				
Test for overall effect: Z =							-1 -0.5 0 0.5
Test for subgroup differe	,	•	< 0.0001) P= 9	93.4%			Incidence of A

2.3.2. Forest Plot of the cross sectional incidence of ASBO compared between laparoscopy and laparotomy data from one intermediate study in Upper GI



2.4.1. Sensitivity analysis of the cross-sectional incidence of ASBO, impact of individual sudies

Study	Point estimate	95% CI
All studies included	0.56	0.49-0.64
Abasbassi 2011	0.57	0.50-0.65
Aberg 2007	0.55	0.47-0.63
Adachi 1995	0.56	0.49-0.64
Atiq 1993	0.56	0.48-0.64
Blachar 2001	0.57	0.49-0.65
Blachar 2002	0.57	0.49-0.65
Cabot 2010	0.57	0.49-0.65
Capella 2006	0.57	0.49-0.65
Champion 2003	0.57	0.49-0.65
Chen 1999	0.56	0.49-0.64
Cho 2006	0.57	0.49-0.65
Chou 2005	0.55	0.47-0.63
Cox 1993	0.56	0.48-0.63
Dasmahapatra 1991	0.56	0.48-0.64
Duron 2008	0.56	0.49-0.64
Edna 1998	0.56	0.49-0.64
Els 1993	0.56	0.48-0.64
Fazio 2006	0.56	0.48-0.64
Gunabushanam 2009	0.57	0.49-0.65
Husain 2007	0.58	0.51-0.65
Hwang 2004	0.57	0.49-0.65
Johanet 1999	0.56	0.47-0.64
Klausner 1995	0.56	0.48-0.64
Lo 2007	0.56	0.48-0.64
MacLean 2002	0.55	0.47-0.63
Miller 2002	0.55	0.48-0.63
Miyashiro 2010	0.56	0.48-0.64
Murphy 2006	0.56	0.48-0.64
Nelson 2006	0.57	0.49-0.65
Olver 1990	0.56	0.48-0.64
Parakh 2007	0.57	0.49-0.65
Parent 1995	0.55	0.47-0.63
Parikh 2008	0.56	0.47-0.65
Ritchey 1993	0.56	0.48-0.64
Rogula 2007	0.57	0.49-0.65
Rosin 2000	0.56	0.48-0.64
Rosin 2007	0.56	0.48-0.64
Suzuki 2003	0.55	0.48-0.63
Taylor 2006	0.57	0.49-0.65
van Eijck 2008	0.56	0.49-0.64
Varkarakis 2007	0.57	0.49-0.65
Yamataka 1997	0.56	0.48-0.64

2.5.1. Sensitivity analysis of the cross-sectional incidence of ASBO, stratified by quality of study

Cturks on Cartain	lac = 2 = 1		Experimental (100-2-11	Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.4.1 Low Quality							
Abasbassi 2011		0.05237828	63	14	2.8%	0.22 [0.12, 0.32]	_
Blachar 2002		0.10597117	21	8	2.5%	0.38 [0.17, 0.59]	
Cho 2006		0.09294286	21	5	2.6%	0.24 [0.06, 0.42]	
Gunabushanam 2009		0.06919603	41	11	2.7%	0.27 [0.13, 0.40]	—
Olver 1990		0.07048404	50	27	2.7%	0.54 [0.40, 0.68]	
Parakh 2007		0.14504073	11	4	2.1%	0.36 [0.08, 0.65]	
Yamataka 1997	0.75	0.125	12	_9	2.3%	0.75 [0.51, 0.99]	
Subtotal (95% CI)			219	78	17.8%	0.38 [0.25, 0.51]	•
Heterogeneity: Tau² = 0. Fest for overall effect: Z			1.0002); l² = 77%				
.4.2 Intermediate Qua	lity						
Adachi 1995	1	0	8	8		Not estimable	
Atiq 1993	0.63636364	0.14504073	11	7	2.1%	0.64 [0.35, 0.92]	
Blachar 2001	0.39583333	0.07058525	48	19	2.7%	0.40 [0.26, 0.53]	
Cabot 2010	0.28571429	0.12073632	14	4	2.3%	0.29 [0.05, 0.52]	
Capella 2006	0.38235294	0.05893156	68	26	2.8%	0.38 [0.27, 0.50]	
Champion 2003	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
Chin 2007	1	0	34	34		Not estimable	
hou 2005	0.90340909	0.02226661	176	159	3.0%	0.90 [0.86, 0.95]	-
Cox 1993	0.81967213	0.0492251	61	50	2.9%	0.82 [0.72, 0.92]	_
Dasmahapatra 1991		0.27216553	3	2	1.2%	0.67 [0.13, 1.20]	
Ouron 2000		0.10206207	24	12	2.5%	0.50 [0.30, 0.70]	
Edna 1998		0.07806365	41	21	2.7%	0.51 [0.36, 0.67]	
Els 1993		0.12881224	15	8	2.3%	0.53 [0.28, 0.79]	
lusain 2007		0.03407259	102	14	2.9%	0.14 [0.07, 0.20]	
lwang 2004		0.05873702	55	14	2.8%	0.25 [0.14, 0.37]	
lohanet 1999		0.02287156	380	276	3.0%	0.73 [0.68, 0.77]	_
(lausner 1995		0.12806021	14	270	2.3%	0.64 [0.39, 0.89]	
_o 2007		0.03017346	271	151	2.9%	0.56 [0.50, 0.62]	_
.o 2007 MacLean 2002		0.03517340	80	71	2.9%	0.89 [0.82, 0.96]	_
Miller 2002		0.06206329	30	26	2.8%		
						0.87 [0.75, 0.99]	
Miyashiro 2010		0.13428163	11	8	2.2%	0.73 [0.46, 0.99]	
Murphy 2006		0.19245009	6	4	1.8%	0.67 [0.29, 1.04]	
Nelson 2006		0.08979978	25	7	2.6%	0.28 [0.10, 0.46]	
Parent 1995		0.04412365	31	29	2.9%	0.94 [0.85, 1.02]	_
Ritchey 1993		0.03534204	131	104	2.9%	0.79 [0.72, 0.86]	
Rogula 2007		0.07654655	40	15	2.7%	0.38 [0.22, 0.53]	
Rosin 2000		0.10102262	19	14	2.5%	0.74 [0.54, 0.93]	
Rosin 2007		0.13826416	13	7	2.2%	0.54 [0.27, 0.81]	
Buzuki 2003		0.08777075	15	13	2.6%	0.87 [0.69, 1.04]	_
aylor 2006	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
an Eijck 2008	1	0	23	23		Not estimable	
arkarakis 2007	0.32608696	0.06911777	46	15	2.7%	0.33 [0.19, 0.46]	—
Subtotal (95% CI) Heterogeneity: Tau² = 0.	.06; Chi²= 661.	19, df= 28 (P	1821 ≤ 0.00001); l² = 9	1160 16%	73.6%	0.58 [0.48, 0.68]	•
est for overall effect: Z	= 11.47 (P < 0.0	00001)					
.4.3 High Quality berg 2007	η 96153946	0.03771464	26	25	2.9%	0.96 [0.89, 1.04]	.
azio 2006		0.06486419	55	35	2.8%	0.64 [0.51, 0.76]	
azio 2000 Parikh 2008		0.00480419	1126	845	3.0%	0.75 [0.73, 0.78]	_
Subtotal (95% CI)	0.73044403	0.01203000	1207	905	3.0% 8.7%	0.79 [0.63, 0.95]	
Heterogeneity: Tau² = 0. Fest for overall effect: Z	•				0.170	5.7 5 [0.03, 0.33]	
	- 5.55 (i ~ 6.60	,	2247	2442	100.0%	0.5610.40.0.641	_
Fotal (95% CI)		e. 10	3247		100.0%	0.56 [0.49, 0.64]	_ _
Heterogeneity: Tau² = 0.							

2.5.2. Table of Sensitivity analysis of the cross-sectional incidence of ASBO, impact of quality of studies

Study	Point estimate	95% CI
All studies included	0.56	0.49-0.64
Low Quality studies only	0.38	0.25-0.51
Intermediate Quality studies only	0.58	0.48-0.68
High Quality studies only	0.79	0.63-0.95

2.6.1. Sensitivity analysis of the cross-sectional incidence of ASBO, stratified by study design

Study or Subgroup	Incidence	SE.	Total	Total	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
1.5.1 Retrospective	incidence	3L	Total	Total	vveigni	iv, Kandom, 95% Ci	IV, Kandolli, 95% Cl
Abasbassi 2011	0.2222222	0.05227020	63	14	2.8%	0.22 [0.12, 0.32]	
Aberg 2007	0.96153846		26	25	2.9%	0.96 [0.89, 1.04]	
Adachi 1995	0.80133040	0.03771404	8	8	2.370	Not estimable	
	0.39583333	0.07058525		0 19	2.7%		
Blachar 2001	0.38095238		48 21	19	2.7%	0.40 [0.26, 0.53]	
Blachar 2002			68	o 26	2.8%	0.38 [0.17, 0.59]	
Capella 2006 Champion 2002	0.38235294 0.38461538					0.38 [0.27, 0.50]	
Champion 2003		0.134932	13 34	5 34	2.2%	0.38 [0.12, 0.65] Not estimable	
Chen 1999	0.23809524	0.00004006	21		260	0.24 [0.06, 0.42]	
Cho 2006				5 450	2.6%		_
Chou 2005	0.90340909		176	159	3.0%	0.90 [0.86, 0.95]	
Cox 1993	0.81967213	0.0492251	61	50	2.9%	0.82 [0.72, 0.92]	<u> </u>
Dasmahapatra 1991	0.66666667		3	2	1.2%	0.67 [0.13, 1.20]	
Duron 2000		0.10206207	24	12	2.5%	0.50 [0.30, 0.70]	
Edna 1998	0.51219512		41	21	2.7%	0.51 [0.36, 0.67]	
Els 1993	0.53333333		15	8	2.3%	0.53 [0.28, 0.79]	
Gunabushanam 2009	0.26829268		41	11	2.7%	0.27 [0.13, 0.40]	
Husain 2001		0.03407259	102	14	2.9%	0.14 [0.07, 0.20]	-
Hwang 2004	0.25454545		55	14	2.8%	0.25 [0.14, 0.37]	—
Johanet 1999	0.72631579		380	276	3.0%	0.73 [0.68, 0.77]	-
Klausner 1995	0.64285714		14	9	2.3%	0.64 [0.39, 0.89]	
Lo 2007	0.55719557		271	151	2.9%	0.56 [0.50, 0.62]	-
MacLean 2002		0.03532771	80	71	2.9%	0.89 [0.82, 0.96]	_
Miller 2002	0.86666667	0.06206329	30	26	2.8%	0.87 [0.75, 0.99]	_
Miyashiro 2010	0.72727273		11	8	2.2%	0.73 [0.46, 0.99]	
Murphy 2006	0.66666667	0.19245009	6	4	1.8%	0.67 [0.29, 1.04]	
Olver 1990	0.54	0.07048404	50	27	2.7%	0.54 [0.40, 0.68]	-
Parakh 2007	0.36363636	0.14504073	11	4	2.1%	0.36 [0.08, 0.65]	
Parent 1995	0.93548387	0.04412365	31	29	2.9%	0.94 [0.85, 1.02]	_
Parikh 2008	0.75044405	0.01289656	1126	845	3.0%	0.75 [0.73, 0.78]	-
Ritchey 1993	0.79389313	0.03534204	131	104	2.9%	0.79 [0.72, 0.86]	_
Rogula 2007	0.375	0.07654655	40	15	2.7%	0.38 [0.22, 0.53]	
Rosin 2000	0.73684211	0.10102262	19	14	2.5%	0.74 [0.54, 0.93]	
Suzuki 2003	0.86666667	0.08777075	15	13	2.6%	0.87 [0.69, 1.04]	
Taylor 2006	0.38461538	0.134932	13	5	2.2%	0.38 [0.12, 0.65]	
van Eijck 2008	1	0	23	23		Not estimable	
Varkarakis 2007	0.32608696	0.06911777	46	15	2.7%	0.33 [0.19, 0.46]	—
Yamataka 1997	0.75	0.125	12	9	2.3%	0.75 [0.51, 0.99]	
Subtotal (95% CI)	_				88.0%	0.57 [0.49, 0.66]	◆
Heterogeneity: Tau² = 0.0 Test for overall effect: Z=							
		,					
1.5.2 Prospective	0.0000000	0.4.450.4055	,,	_	0.40	0.0410.05.005	
Atiq 1993		0.14504073	11	7	2.1%	0.64 [0.35, 0.92]	
Cabot 2010		0.12073632	14	4	2.3%	0.29 [0.05, 0.52]	
Fazio 2006		0.06486419	55	35	2.8%	0.64 [0.51, 0.76]	-
Nelson 2006		0.08979978	25	7	2.6%	0.28 [0.10, 0.46]	
Rosin 2007	0.53846154	0.13826416	13	7	2.2%	0.54 [0.27, 0.81]	
Subtotal (95% CI)			118	60	12.0%	0.47 [0.30, 0.65]	→
Heterogeneity: Tau² = 0.1 Test for overall effect: Z =	•		1.006); I	²= 72%	6		
Total (95% CI)			3247	2143	100.0%	0.56 [0.49, 0.64]	•
Heterogeneity: Tau² = 0.1	05: Chi² = 898 i	54 df = 38 (P ·					
Test for overall effect: Z=			. 0.000	.517,1 -	- 30 /0		-1 -0.5 0 0.5 1
	- 194.22 (F 🤼 U.U	,0001)					Incidence

2.6.2. Table of Sensitivity analysis of the cross-sectional incidence of ASBO, impact of study design

Study	Point estimate	95% CI
All studies included	0.56	0.49-0.64
Retrospective studies only	0.57	0.49-0.66
Prospective studies only	0.47	0.30-0.65

2.7.1. Sensitivity analysis of the cross-sectional incidence of ASBO, stratified by publication date

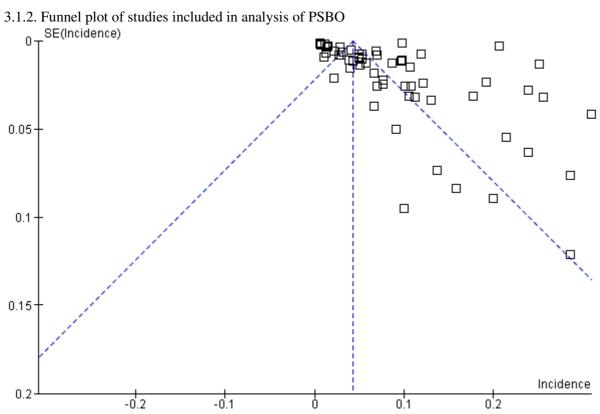
Church on Cult	lan ad al a secon	-	Experimental (18/-1-1-1	Incidence	Incidence
Study or Subgroup 1.7.1 Studies published	Incidence	SE 2000	Total	rotal	weight	IV, Random, 95% CI	IV, Random, 95% CI
•	_					NI=4 = =4: = 1-1 =	
Adachi 1995	1	0 4 450 4070		8	2.400	Not estimable	
Atiq 1993		0.14504073		7	2.1%	0.64 [0.35, 0.92]	
Chen 1999	1	0		34	0.00/	Not estimable	
Cox 1993	0.81967213	0.0492251	61	50	2.9%	0.82 [0.72, 0.92]	_
Dasmahapatra 1991		0.27216553		2	1.2%	0.67 [0.13, 1.20]	
Edna 1998		0.07806365		21	2.7%	0.51 [0.36, 0.67]	
Els 1993		0.12881224		8	2.3%	0.53 [0.28, 0.79]	
Johanet 1999		0.02287156		276	3.0%	0.73 [0.68, 0.77]	-
Klausner 1995	0.64285714		14	9	2.3%	0.64 [0.39, 0.89]	
Olver 1990		0.07048404		27	2.7%	0.54 [0.40, 0.68]	
Parent 1995		0.04412365		29	2.9%	0.94 [0.85, 1.02]	_
Ritchey 1993		0.03534204		104	2.9%	0.79 [0.72, 0.86]	_
Yamataka 1997	0.75	0.125		9	2.3%	0.75 [0.51, 0.99]	
Subtotal (95% CI)			791	584	27.2%	0.71 [0.63, 0.79]	•
Heterogeneity: Tau² = 0.1 Test for overall effect: Z =			: 0.00001); I * = 78	%			
1.7.2 Studies published	-		60	4.4	2.00	0.00 (0.40, 0.00)	
Abasbassi 2011		0.05237828		14	2.8%	0.22 [0.12, 0.32]	
Aberg 2007		0.03771464		25	2.9%	0.96 [0.89, 1.04]	~
Blachar 2001		0.07058525		19	2.7%	0.40 [0.26, 0.53]	—
Blachar 2002		0.10597117		8	2.5%	0.38 [0.17, 0.59]	
Cabot 2010		0.12073632		4	2.3%	0.29 [0.05, 0.52]	
Capella 2006		0.05893156		26	2.8%	0.38 [0.27, 0.50]	_
Champion 2003	0.38461538	0.134932		5	2.2%	0.38 [0.12, 0.65]	
Cho 2006		0.09294286		5	2.6%	0.24 [0.06, 0.42]	
Chou 2005		0.02226661	176	159	3.0%	0.90 [0.86, 0.95]	_
Duron 2000		0.10206207		12	2.5%	0.50 [0.30, 0.70]	
Fazio 2006	0.63636364	0.06486419		35	2.8%	0.64 [0.51, 0.76]	_
Gunabushanam 2009	0.26829268	0.06919603	41	11	2.7%	0.27 [0.13, 0.40]	
Husain 2007	0.1372549	0.03407259		14	2.9%	0.14 [0.07, 0.20]	-
Hwang 2004	0.25454545	0.05873702	55	14	2.8%	0.25 [0.14, 0.37]	—
Lo 2007	0.55719557	0.03017346	271	151	2.9%	0.56 [0.50, 0.62]	_
MacLean 2002	0.8875	0.03532771	80	71	2.9%	0.89 [0.82, 0.96]	_
Miller 2002	0.86666667	0.06206329	30	26	2.8%	0.87 [0.75, 0.99]	_
Miyashiro 2010	0.72727273	0.13428163	11	8	2.2%	0.73 [0.46, 0.99]	_
Murphy 2006	0.66666667	0.19245009	6	4	1.8%	0.67 [0.29, 1.04]	
Nelson 2006	0.28	0.08979978	25	7	2.6%	0.28 [0.10, 0.46]	
Parakh 2007		0.14504073		4	2.1%	0.36 [0.08, 0.65]	
Parikh 2008		0.01289656		845	3.0%	0.75 [0.73, 0.78]	-
Rogula 2007		0.07654655		15	2.7%	0.38 [0.22, 0.53]	
Rosin 2000		0.10102262		14	2.5%	0.74 [0.54, 0.93]	
Rosin 2007		0.13826416		7	2.2%	0.54 [0.27, 0.81]	
Suzuki 2003		0.08777075		13	2.6%	0.87 [0.69, 1.04]	
Taylor 2006	0.38461538	0.134932		5	2.2%	0.38 [0.12, 0.65]	
van Eijck 2008	1	0.104332		23	2.270	Not estimable	
Varkarakis 2007		0.06911777		15	2.7%	0.33 [0.19, 0.46]	
Subtotal (95% CI)	5.52000030	5.00511777	2456	1559	72.8%	0.51 [0.41, 0.61]	•
Heterogeneity: Tau² = 0.					. 2.070	2.2 / [217 1] 010 1]	
Test for overall effect: Z =	= 9.81 (P < 0.00	0001)					
Total (95% CI)			3247		100.0%	0.56 [0.49, 0.64]	•
Hotoropopoity Touz - 0 :	05: Chi² = 898 I	54, df = 38 (P	$< 0.00001); I^2 = 9$	6%			-1 -0.5 0 0.5 1
meterogeneity. Tauf = 0.1	00,0 000.						

2.7.2. Table of sensitivity analysis of the cross-sectional incidence of ASBO, impact of publication date

Study	Point estimate	95% CI
All studies included	0.56	0.49-0.64
Studies published before 2000	0.71	0.63-0.79
Studies published from the year 2000 and later	0.51	0.41-0.61

3.1.1 Forest plot of the incidence of PSBO, including all studies

Abasbassi 2011 Aberg 2007 Abol-Enein 2001 Adachi 1995 Atiq 1993 Beck 1999 Blachar 2002 Bringman 2005 Cabot 2010		0.01157062 0.03180152	Total 652 188	63 48	1.9%	IV, Random, 95% CI 0.10 [0.07, 0.12]	IV, Random, 95% CI
Aberg 2007 Abol-Enein 2001 Adachi 1995 Atiq 1993 Beck 1999 Blachar 2002 Bringman 2005	0.25531915 0.01260504	0.03180152					
Abol-Enein 2001 Adachi 1995 Atiq 1993 Beck 1999 Blachar 2002 Bringman 2005	0.01260504		100		1.5%	0.26 (0.46,0.22)	
Adachi 1995 Atiq 1993 Beck 1999 Blachar 2002 Bringman 2005			238	3	1.9%	0.26 [0.19, 0.32] 0.01 [-0.00, 0.03]	_
Atiq 1993 Beck 1999 Blachar 2002 Bringman 2005	0.43410201		23	10	0.5%	0.43 [0.23, 0.64]	_
Beck 1999 Blachar 2002 Bringman 2005	0.28571420	0.07636035	35	10	0.7%	0.29 [0.14, 0.44]	
Blachar 2002 Bringman 2005		0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]	_
3ringman 2005	0.04967603		463	23	1.9%	0.05 [0.03, 0.07]	-
-	0.00518583		1157	6	2.0%	0.01 [0.00, 0.01]	ļ.
		0.00938184	530	26	1.9%	0.05 [0.03, 0.07]	—
Capella 2006	0.09756098		697	68	1.9%	0.10 [0.08, 0.12]	-
Catena 2012	0.06629834		181	12	1.8%	0.07 [0.03, 0.10]	—
Champion 2003		0.00597333	597	13	2.0%	0.02 [0.01, 0.03]	- -
Chang 2012		0.08944272	20	4	0.6%	0.20 [0.02, 0.38]	
Cho 2006		0.00324863	1400	21	2.0%	0.01 [0.01, 0.02]	-
Coran 1990		0.03363034	100	13	1.5%	0.13 [0.06, 0.20]	
Dasmahapatra 1991	0.06666667		45	3	1.4%	0.07 [-0.01, 0.14]	
Edna 1998	0.08686441		472	41	1.9%	0.09 [0.06, 0.11]	—
El-Gohary 2010	0.07627119		118	9	1.7%	0.08 [0.03, 0.12]	—
Els 1993		0.02428802	181	22	1.7%	0.12 [0.07, 0.17]	
an 2001		0.12073632	14	4	0.4%	0.29 [0.05, 0.52]	<u> </u>
Fazio 2006		0.00786045	1701	203	1.9%	0.12 [0.10, 0.13]	-
Gunabushanam 2009		0.00747778	835	41	1.9%	0.05 [0.03, 0.06]	-
Hashimoto 2012		0.04166233	123	38	1.3%	0.31 [0.23, 0.39]	-
Hayashi 2008	0.07638889		144	11	1.7%	0.08 [0.03, 0.12]	
Hwang 2004	0.04008746		1372	55	2.0%	0.04 [0.03, 0.05]	-
Khaitan 2003	0.15789474		19	3	0.6%	0.16 [-0.01, 0.32]	
_ee 2012	0.06986028		1002	70	1.9%	0.07 [0.05, 0.09]	_
_eung 2009		0.00392283	1777	50	2.0%	0.03 [0.02, 0.04]	-
_umley 2002	0.03896104		154	6	1.8%	0.04 [0.01, 0.07]	
MacLean 2002	0.25138632		1082	272	1.9%	0.25 [0.23, 0.28]	_
√ais 1998		0.03148648	95	10	1.5%	0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833	10	1	0.5%	0.10 [-0.09, 0.29]	-
Miyashiro 2010		0.00389022	847	11	2.0%	0.01 [0.01, 0.02]	-
Montz 1994		0.03188723	98	11	1.5%	0.11 [0.05, 0.17]	
Muffly 2012	0.00511894		3321	17	2.0%	0.01 [0.00, 0.01]	
Murphy 2006	0.23913043		46	11	0.9%	0.24 [0.12, 0.36]	
Velson 2006	0.03188776		784	25	2.0%	0.03 [0.02, 0.04]	-
Va 2009	0.10810811		148	16	1.7%	0.11 [0.06, 0.16]	
Nieuwenhuijzen 1998	0.23931624		234	56	1.6%	0.24 [0.18, 0.29]	
Nour 1996	0.10144928		138	14	1.7%	0.10 [0.05, 0.15]	
Parakh 2007	0.03793103		290	11	1.9%	0.04 [0.02, 0.06]	
Parikh 2008	0.09733322	0.00137019	46798	4555	2.0%	0.10 [0.09, 0.10]	-
Ragni 1996		0.02150154	46	1	1.7%	0.02 [-0.02, 0.06]	
Rempen 1995		0.00956905	104	1	1.9%	0.01 [-0.01, 0.03]	+
Ritchey 1993		0.00578327	1910	131	2.0%	0.07 [0.06, 0.08]	-
Rogula 2007	0.01155068	0.00181574	3463	40	2.0%	0.01 [0.01, 0.02]	-
Rosin 2007	0.04248366		306	13	1.9%	0.04 [0.02, 0.07]	-
Baklani 2012	0.05740181	0.01278533	331	19	1.9%	0.06 [0.03, 0.08]	—
3alum 2001		0.01065803	438	23	1.9%	0.05 [0.03, 0.07]	—
Scholin 2011		0.00793115	786	41	1.9%	0.05 [0.04, 0.07]	_
3ileri 2008		0.02370974	276	53	1.7%	0.19 [0.15, 0.24]	
Sowande 2011	0.09090909	0.05004381	33	3	1.1%	0.09 [-0.01, 0.19]	
Talwar 1997	0.21428571		56	12	1.0%	0.21 [0.11, 0.32]	
Tashjian 2007	0.13636364	0.073165	22	3	0.8%	0.14 [-0.01, 0.28]	
Taylor 2006		0.00800084	444	13	1.9%	0.03 [0.01, 0.04]	
Γaylor 2010		0.00796093	411	11	1.9%	0.03 [0.01, 0.04]	
rsao 2007		0.00255038	1105	8	2.0%	0.01 [0.00, 0.01]	ŀ
an Eijck 2008		0.03147048	147	26	1.5%	0.18 [0.12, 0.24]	
/arkarakis 2007	0.10599078		434	46	1.9%	0.11 [0.08, 0.13]	
Vang 1999	0.07	0.0255147	100	7	1.7%	0.07 [0.02, 0.12]	
ramataka 1997		0.01406829	240	12	1.9%	0.05 [0.02, 0.08]	
otal (95% CI)	00.01.7 =====		97693		100.0%	0.09 [0.07, 0.10]	, ~
leterogeneity: Tau² = 0.0 est for overall effect: Z =			< 0.00001); I*=	99%			-0.2 -0.1 0 0.1 0.2 Incidence



3.2.1. Forest plot of analysis for the incidence of PSBO in studies with adequate description of follow-up for best and worst case scenario analysis.

41 studies included, 27 studies without loss to follow-up (=at least one long term follow-up moment in each patient)

			Experimental	Control		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Aberg 2007	0.25531915	0.03180152	188	48	2.4%	0.26 [0.19, 0.32]	
Abol-Enein 2001	0.01260504	0.00723151	238	3	2.9%	0.01 [-0.00, 0.03]	<u> </u>
Adachi 1995	0.43478261	0.10336653	23	10	0.9%	0.43 [0.23, 0.64]	
Atiq 1993	0.28571429	0.07636035	35	10	1.3%	0.29 [0.14, 0.44]	
Beck 1999	0.20658841	0.00294397	18912	3907	3.0%	0.21 [0.20, 0.21]	
Bringman 2005	0.00518583	0.00211161	1157	6	3.0%	0.01 [0.00, 0.01]	,
Cabot 2010	0.0490566	0.00938184	530	26	2.9%	0.05 [0.03, 0.07]	-
Capella 2006	0.09756098	0.01123908	697	68	2.9%	0.10 [0.08, 0.12]	I
Catena 2012	0.06629834	0.01849337	181	12	2.8%	0.07 [0.03, 0.10]	
Champion 2003	0.02177554	0.00597333	597	13	2.9%	0.02 [0.01, 0.03]	-
Chang 2012	0.2	0.08944272	20	4	1.1%	0.20 [0.02, 0.38]	
Coran 1990		0.03363034		13	2.4%	0.13 [0.06, 0.20]	
Dasmahapatra 1991	0.06666667	0.03718489	45	3	2.3%	0.07 [-0.01, 0.14]	-
Edna 1998	0.08686441	0.01296336	472	41	2.9%	0.09 [0.06, 0.11]	l l
El-Gohary 2010	0.07627119	0.02443495	118	9	2.6%	0.08 [0.03, 0.12]	l l
Els 1993		0.02428802		22	2.6%	0.12 [0.07, 0.17]	
Fan 2001		0.12073632		4	0.7%	0.29 [0.05, 0.52]	I
Fazio 2006		0.00786045		203	2.9%	0.12 [0.10, 0.13]	
Hayashi 2008		0.02213494		11	2.7%	0.08 [0.03, 0.12]	I
Hwang 2004		0.00529594		55	3.0%	0.04 [0.03, 0.05]	
Khaitan 2003		0.08365468		3	1.2%	0.16 [-0.01, 0.32]	
Leung 2009		0.00392283		50	3.0%	0.03 [0.02, 0.04]	
Lumley 2002		0.01559285		6	2.8%	0.04 [0.01, 0.07]	
MacLean 2002		0.01318822		272	2.9%	0.25 [0.23, 0.28]	
Mais 1998		0.03148648		10	2.4%	0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833		1	1.0%	0.10 [-0.09, 0.29]	
Muffly 2012		0.00123834		17	3.0%	0.01 [0.00, 0.01]	
Murphy 2006		0.06289174		11	1.6%	0.24 [0.12, 0.36]	
Nelson 2006		0.00627504		25	2.9%	0.03 [0.02, 0.04]	
Ng 2009		0.02552433		16	2.6%	0.11 [0.06, 0.16]	
Nieuwenhuijzen 1998		0.02789204		56	2.5%	0.24 [0.18, 0.29]	
Nour 1996		0.02570137		14	2.6%	0.10 [0.05, 0.15]	
Ragni 1996		0.02150154		1	2.7%	0.02 [-0.02, 0.06]	
Rosin 2007		0.01152984		13	2.9%	0.04 [0.02, 0.07]	I
Saklani 2012		0.01278533		19	2.9%	0.06 [0.03, 0.08]	
Scholin 2011		0.00793115		41	2.9%	0.05 [0.04, 0.07]	
Sileri 2008		0.02370974		53	2.6%	0.19 [0.15, 0.24]	
Tashjian 2007		0.05004381		3	1.9%	0.09 [-0.01, 0.19]	
Taylor 2010	0.13636364	0.073165		3	1.4%	0.14 [-0.01, 0.28]	
Varkarakis 2007		0.00796093		11	2.9%	0.03 [0.01, 0.04]	
Wang 1999		0.00255038		8	3.0%	0.01 [0.00, 0.01]	
_				F40.1			•
Total (95% CI)	00: Obiz = 402:	0 00 df = 40 f	37849		100.0%	0.10 [0.07, 0.12]	•
Heterogeneity: Tau² = 0. Test for overall effect: Z:			r < 0.00001);	= 99%			-0.5 -0.25 0 0.25 0.5
restion overall ellett. Z-	- 0.23 (F ≥ 0.0)	0001)					incidence

3.2.2. Forest plot of best case analysis for the incidence of PSBO Experimental Control

			Experimental			Incidence	Incidence
Study or Subgroup	Incidence	SE	Total			IV, Random, 95% CI	IV, Random, 95% CI
berg 2007		0.03180152	188	48		0.26 [0.19, 0.32]	
bol-Enein 2001	0.00872093	0.00501303	344	3	3.0%	0.01 [-0.00, 0.02]	<u> </u>
dachi 1995	0.43478261	0.10336653	23	10	0.8%	0.43 [0.23, 0.64]	
tiq 1993	0.28571429	0.07636035	35	10	1.2%	0.29 [0.14, 0.44]	
leck 1999	0.20658841	0.00294397	18912	3907	3.0%	0.21 [0.20, 0.21]	
ringman 2005	0.00518583	0.00211161	1157	6	3.0%	0.01 [0.00, 0.01]	<u> </u>
abot 2010	0.04727273	0.00904916	550	26	2.9%	0.05 [0.03, 0.07]	
apella 2006	0.09756098	0.01123908	697	68	2.9%	0.10 [0.08, 0.12]	-
atena 2012	0.06629834	0.01849337	181	12	2.8%	0.07 [0.03, 0.10]	
Champion 2003	0.01828411	0.00502452	711	13	3.0%	0.02 [0.01, 0.03]	-
Chang 2012	0.2	0.08944272	20	4	1.0%	0.20 [0.02, 0.38]	
oran 1990	0.13	0.03363034	100	13	2.3%	0.13 [0.06, 0.20]	
asmahapatra 1991	0.06666667		45	3		0.07 [-0.01, 0.14]	-
dna 1998	0.08686441		472	41	2.9%	0.09 [0.06, 0.11]	-
H-Gohary 2010	0.05590062		161	9		0.06 [0.02, 0.09]	-
:ls 1993	0.12154696		181	22		0.12 [0.07, 0.17]	
an 2001	0.28571429		14	4		0.29 [0.05, 0.52]	
azio 2006		0.00749083	1791	203		0.11 [0.10, 0.13]	_
layashi 2008	0.07333333		150	11		0.07 [0.03, 0.12]	
lwang 2004	0.03206997		1715	55		0.03 [0.02, 0.04]	_
haitan 2003	0.05200337		19	3		0.16 [-0.01, 0.32]	
eung 2009	0.02144082		2332	50		0.02 [0.02, 0.03]	_
umley 2009.			155	6			
•	0.03870968 0.23089983		1178			0.04 [0.01, 0.07]	_
MacLean 2002				272		0.23 [0.21, 0.25]	<u> </u>
Mais 1998	0.10526316		95	10		0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833	10	1	0.9%	0.10 [-0.09, 0.29]	
1uffly 2012	0.00511124		3326	17	3.0%	0.01 [0.00, 0.01]	
Murphy 2006	0.19298246		57	11		0.19 [0.09, 0.30]	
Velson 2006	0.03188776		784	25		0.03 [0.02, 0.04]	_
Ng 2009	0.10810811		148	16		0.11 [0.06, 0.16]	—
Nieuwenhuijzen 1998	0.23931624		234	56		0.24 [0.18, 0.29]	-
Nour 1996	0.10144928		138	14		0.10 [0.05, 0.15]	—
Ragni 1996	0.02173913		46	1	2.7%	0.02 [-0.02, 0.06]	
Rosin 2007	0.04248366	0.01152984	306	13		0.04 [0.02, 0.07]	-
Saklani 2012	0.05292479	0.01181611	359	19	2.9%	0.05 [0.03, 0.08]	_
Scholin 2011	0.04248705		965	41	3.0%	0.04 [0.03, 0.06]	-
Bileri 2008	0.19202899	0.02370974	276	53	2.6%	0.19 [0.15, 0.24]	—
ashjian 2007	0.09090909	0.05004381	33	3	1.9%	0.09 [-0.01, 0.19]	
aylor 2010	0.13636364	0.073165	22	3	1.3%	0.14 [-0.01, 0.28]	
arkarakis 2007	0.02315789	0.00690105	475	11	3.0%	0.02 [0.01, 0.04]	-
Vang 1999	0.00723982	0.00255038	1105	8	3.0%	0.01 [0.00, 0.01]	•
otal (95% CI)			39510	E404	100.0%	0.09 [0.07, 0.11]	

3.2.3. Forest plot of worst case analysis for the incidence of PSBO Experimental Control

			Experimental			Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
lberg 2007	0.25531915	0.03180152	188	48	2.5%	0.26 [0.19, 0.32]	
bol-Enein 2001	0.31686047	0.02508473	344	109	2.6%	0.32 [0.27, 0.37]	_
dachi 1995	0.43478261	0.10336653	23	10	1.2%	0.43 [0.23, 0.64]	
tiq 1993	0.28571429	0.07636035	35	10	1.6%	0.29 [0.14, 0.44]	
eck 1999	0.20658841	0.00294397	18912	3907	2.8%	0.21 [0.20, 0.21]	-
ringman 2005	0.00518583	0.00211161	1157	6	2.8%	0.01 [0.00, 0.01]	<u> </u>
abot 2010	0.08363636	0.01180457	550	46	2.8%	0.08 [0.06, 0.11]	-
apella 2006	0.09756098	0.01123908	697	68	2.8%	0.10 [0.08, 0.12]	_
atena 2012	0.06629834	0.01849337	181	12	2.7%	0.07 [0.03, 0.10]	-
hampion 2003		0.01436494	711	127	2.8%	0.18 [0.15, 0.21]	-
hang 2012		0.08944272	20	4	1.4%	0.20 [0.02, 0.38]	
oran 1990		0.03363034	100	13	2.5%	0.13 [0.06, 0.20]	
asmahapatra 1991		0.03718489	45	3	2.4%	0.07 [-0.01, 0.14]	
dna 1998		0.01296336	472	41	2.8%	0.09 [0.06, 0.11]	-
H-Gohary 2010		0.03685328	161	52	2.4%	0.32 [0.25, 0.40]	
ils 1993		0.02428802	181	22	2.6%	0.12 [0.07, 0.17]	
an 2001		0.12073632	14	4	1.0%	0.29 [0.05, 0.52]	
azio 2006	0.16359576	0.0087407	1791	293	2.8%	0.16 [0.15, 0.18]	-
azio 2000 Iayashi 2008		0.02588293	150	17	2.6%	0.11 [0.06, 0.16]	
lwang 2004		0.01019385	1715	398	2.8%	0.23 [0.21, 0.25]	_
haitan 2003		0.08365468	1715	390	1.5%	0.16 [-0.01, 0.32]	
	0.15769474		2332	605	2.8%		
eung 2009						0.26 [0.24, 0.28]	
umley 2002		0.01667947	155	7	2.7%	0.05 [0.01, 0.08]	_
MacLean 2002		0.01350357	1178	368	2.8%	0.31 [0.29, 0.34]	
1ais 1998	0.10526316		95	10	2.5%	0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833	10	1	1.3%	0.10 [-0.09, 0.29]	
fuffly 2012		0.00140556	3326	22	2.8%	0.01 [0.00, 0.01]	
furphy 2006	0.38596491	0.0644812	57	22	1.9%	0.39 [0.26, 0.51]	
lelson 2006		0.00627504	784	25	2.8%	0.03 [0.02, 0.04]	
lg 2009		0.02552433	148	16	2.6%	0.11 [0.06, 0.16]	_
lieuwenhuijzen 1998		0.02789204	234	56	2.6%	0.24 [0.18, 0.29]	
lour 1996		0.02570137	138	14	2.6%	0.10 [0.05, 0.15]	—
łagni 1996		0.02150154	46	1	2.7%	0.02 [-0.02, 0.06]	<u> </u>
losin 2007	0.04248366	0.01152984	306	13	2.8%	0.04 [0.02, 0.07]	-
aklani 2012	0.13091922	0.01780265	359	47	2.7%	0.13 [0.10, 0.17]	-
cholin 2011	0.22797927	0.01350512	965	220	2.8%	0.23 [0.20, 0.25]	_
lileri 2008	0.19202899	0.02370974	276	53	2.6%	0.19 [0.15, 0.24]	_
ashjian 2007	0.09090909		33	3	2.2%	0.09 [-0.01, 0.19]	
aylor 2010	0.13636364	0.073165	22	3	1.7%	0.14 [-0.01, 0.28]	
arkarakis 2007	0.15789474	0.01673094	475	75	2.7%	0.16 [0.13, 0.19]	-
Vang 1999	0.00723982	0.00255038	1105	8	2.8%	0.01 [0.00, 0.01]	
otal (95% CI)			39510	6762	100.0%	0.15 [0.12, 0.18]	

3.3.1. Forest plot of the cumulative incidence of PSBO, stratified by anatomical location

	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Rando	om, 95% CI
.3.1 General Surgery eck 1999	0.20658841	0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]		
atena 2012	0.06629834		181	12	1.8%	0.07 [0.03, 0.10]		-
ashimoto 2012	0.30894309		123	38	1.3%	0.31 [0.23, 0.39]		
haitan 2003 ais 1998	0.15789474 0.10526316		19 95	3 10	0.6% 1.5%	0.16 [-0.01, 0.32] 0.11 [0.04, 0.17]		
ubtotal (95% CI)	0.10320310	0.03140040	19330	3970	7.2%	0.17 [0.08, 0.25]		•
eterogeneity: Tau² = 0.			00001); I²= 94%					
est for overall effect: Z:	= 3.92 (P < 0.00	01)						
.3.2 Upper GI Surgery								
basbassi 2011	0.09662577		652	63	1.9%	0.10 [0.07, 0.12]		-
dachi 1995	0.43478261 0.28571429		23	10	0.5%	0.43 [0.23, 0.64]		
tiq 1993 lachar 2002	0.26571429		35 463	10 23	0.7% 1.9%	0.29 [0.14, 0.44] 0.05 [0.03, 0.07]		-
apella 2006	0.09756098		697	68	1.9%	0.10 [0.08, 0.12]		-
hampion 2003	0.02177554	0.00597333	597	13	1.9%	0.02 [0.01, 0.03]		-
ho 2006		0.00324863	1400	21	2.0%	0.01 [0.01, 0.02]		•
unabushanam 2009 layashi 2008	0.0491018	0.00747778	835 144	41 11	1.9% 1.7%	0.05 [0.03, 0.06] 0.08 [0.03, 0.12]		-
wang 2004	0.04008746		1372	55	1.9%	0.04 [0.03, 0.05]		-
liyashiro 2010	0.01298701		847	11	2.0%	0.01 [0.01, 0.02]		-
lelson 2006	0.03188776		784	25	1.9%	0.03 [0.02, 0.04]		-
arakh 2007 ogula 2007	0.03793103 0.01155068		290 3463	11 40	1.9% 2.0%	0.04 [0.02, 0.06] 0.01 [0.01, 0.02]		_
aylor 2006	0.02927928		444	13	1.9%	0.03 [0.01, 0.04]		_
ubtotal (95% CI)	0.02021020	0.0000000	12046	415	26.0%	0.04 [0.03, 0.06]		•
leterogeneity: Tau² = 0.			0.00001); I² = 93	%				
est for overall effect: Z:	= 7.09 (P < 0.00	001)						
3.3 Lower GI surgery								
berg 2007 abot 2010	0.25531915 0.0490566	0.03180152 0.00938184	188 530	48 26	1.5% 1.9%	0.26 [0.19, 0.32] 0.05 [0.03, 0.07]		_
oran 1990		0.00938184	100	13	1.5%	0.05 [0.03, 0.07]		
asmahapatra 1991	0.06666667	0.03718489	45	3	1.4%	0.07 [-0.01, 0.14]		-
dna 1998	0.08686441		472	41	1.9%	0.09 [0.06, 0.11]		-
ls 1993	0.12154696 0.28571429		181	22	1.7%	0.12 [0.07, 0.17]		
an 2001 azio 2006	0.28571429		14 1701	4 203	0.4% 1.9%	0.29 [0.05, 0.52] 0.12 [0.10, 0.13]		
ee 2012	0.06986028		1002	70	1.9%	0.07 [0.05, 0.09]		-
eung 2009	0.02813731	0.00392283	1777	50	2.0%	0.03 [0.02, 0.04]		-
umley 2002	0.03896104		154	6	1.8%	0.04 [0.01, 0.07]		_
lacLean 2002 Ig 2009	0.25138632 0.10810811		1082 148	272 16	1.9% 1.6%	0.25 [0.23, 0.28] 0.11 [0.06, 0.16]		
lieuwenhuijzen 1998	0.23931624		234	56	1.6%	0.24 [0.18, 0.29]		-
arikh 2008	0.09733322		46798	4555	2.0%	0.10 [0.09, 0.10]		
agni 1996	0.02173913		46	1	1.7%	0.02 [-0.02, 0.06]		+
osin 2007 aklani 2012	0.04248366 0.04248366		306 331	13 19	1.9% 1.9%	0.04 [0.02, 0.07] 0.04 [0.02, 0.07]		
akianii 2012 alum 2001	0.04246366		438	23	1.9%	0.04 [0.02, 0.07]		-
cholin 2011	0.05740181		786	41	1.9%	0.06 [0.03, 0.08]		-
lleri 2008	0.05251142		276	53	1.9%	0.05 [0.03, 0.07]		-
alwar 1997	0.05216285		56	12	1.9%	0.05 [0.04, 0.07]		_
aylor 2010 ubtotal (95% CI)	0.19202899	0.02370974	411 57076	11 5558	1.7% 39.6 %	0.19 [0.15, 0.24] 0.10 [0.08, 0.12]		•
eterogeneity: Tau² = 0.	.00; Chi² = 653.2	29, df = 22 (P <						`
est for overall effect: Z :	= 9.40 (P < 0.00	001)						
.3.4 hepato-biliairy and	d pancreatic su	rgery						
amataka 1997	0.05	0.01406829	240	12	1.9%	0.05 [0.02, 0.08]		<u> </u>
ubtotal (95% CI) leterogeneity: Not appli	icable		240	12	1.9%	0.05 [0.02, 0.08]		*
		04)						
est for overall effect. 2.	= 3.55 (P = 0.00							
.3.5 Abdominal wall su ringman 2005			1157	6	2.0%	0.01 [0.00, 0.01]		
.3.5 Abdominal wall su ringman 2005 ubtotal (95% CI)	u rgery 0.00518583		1157 1157	6 6	2.0% 2.0 %	0.01 [0.00, 0.01] 0.01 [0.00, 0.01]		
.3.5 Abdominal wall su ringman 2005 ubtotal (95% CI) leterogeneity: Not appli	urgery 0.00518583 icable	0.00211161						
.3.5 Abdominal wall su ringman 2005 ubtotal (95% CI) eterogeneity: Not appli est for overall effect: Z	urgery 0.00518583 icable = 2.46 (P = 0.01)	0.00211161						
.3.5 Abdominal wall su ingman 2005 ubtotal (95% CI) eterogeneity: Not appli est for overall effect: Z .3.6 Gynecological sur	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery	0.00211161	1157	6	2.0%	0.01 [0.00, 0.01]		
.3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity: Not appliest for overall effect: Z: .3.6 Gynecological suriontz 1994	0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449	0.00211161	1157	11	2.0% 1.5%	0.01 (0.00, 0.01) 0.11 (0.05, 0.17)		
3.5 Abdominal wall suringman 2005 ubtotal (95% Ct) leterogeneity: Not appliest for overall effect. Z : 3.6 Gynecological suriontz 1994 uffly 2012	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894	0.00211161) 0.03188723 0.00123834	98 3321	11 17	2.0% 1.5% 2.0%	0.01 (0.00, 0.01) 0.11 (0.05, 0.17) 0.01 (0.00, 0.01)		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) eterogeneity: Not appliest for overall effect: Z: 3.6 Gynecological surontz 1994 utily 2012 empen 1995	0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449	0.00211161) 0.03188723 0.00123834	1157	11	2.0% 1.5%	0.01 (0.00, 0.01) 0.11 (0.05, 0.17)		
3.5 Abdominal wall suringman 2005 ubtotal (95% C) eterogeneity: Not appliest for overall effect. Z : 3.6 Gynecological surontz 1994 uffly 2012 empen 1995 ubtotal (95% C) eterogeneity: Tau² = 0.	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.	98 3321 104 3523	11 17 1	2.0% 1.5% 2.0% 1.9%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03]		
.3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity: Not appliest for overall effect: Z: .3.6 Gynecological suriontz 1994	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.	98 3321 104 3523	11 17 1	2.0% 1.5% 2.0% 1.9%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not applie est for overall effect. Z : 3.6 Gynecological sur ontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) leterogeneity. Tau² = 0. est for overall effect. Z : 3.7 Urological Surgen	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961638 .00; ChiF = 11.47 = 1.54 (P = 0.12)	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.)	98 3321 104 3 523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 (0.00, 0.01) 0.11 (0.05, 0.17) 0.01 (0.00, 0.01) 0.01 (-0.01, 0.03) 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) eterogeneity. Not appliest for overall effect. Z = 3.6 Gynecological suriontz 1994 uffly 2012 empen 1995 upontal 1995 CI) eterogeneity. Tau² = 0. est for overall effect. Z = 3.7 Urological Surgery bol-Enein 2001	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961538 .00; Chi ² = 11.47 = 1.54 (P = 0.12) y 0.01260504	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.)	98 3321 104 3523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not applie est for overall effect. Z : 3.6 Gynecological sur ontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) leterogeneity. Tau² = 0. est for overall effect. Z : 3.7 Urological Surgen	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961638 .00; ChiF = 11.47 = 1.54 (P = 0.12)	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.)	98 3321 104 3 523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) eterogeneity. Not appliest for overall effect. Z : 3.6 Gynecological suriontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z : 3.7 Urological Surgen; bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) eterogeneity. Tau² = 0.	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961538 .00; Chi ² = 11.47 = 1.54 (P = 0.12) y 0.01260504 0.10599078 .00; Chi ² = 32.22	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.	98 3321 104 3523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) eterogeneity. Not appliest for overall effect. Z : 3.6 Gynecological suriontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z : 3.7 Urological Surgen; bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) eterogeneity. Tau² = 0.	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961538 .00; Chi ² = 11.47 = 1.54 (P = 0.12) y 0.01260504 0.10599078 .00; Chi ² = 32.22	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.	98 3321 104 3523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not appliest for overall effect: Z : 3.6 Gynecological suroniz 1994 uffly 2012 empen 1995 ubtotal (95% CI) leterogeneity: Tau" = 0. est for overall effect: Z : 3.7 Urological Surgen tol-Enein 2001 arkarakis 2007 ubtotal (95% CI)	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961538 .00; ChiP = 11.47 = 1.54 (P = 0.12) y 0.01260504 0.10599078 .00; ChiP = 32.22 = 1.25 (P = 0.21)	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.	98 3321 104 3523 003); F= 83%	11 17 1 29	2.0% 1.5% 2.0% 1.9% 5.4%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not appliest for overall effect. Z: 3.6 Gynecological sur ontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) leterogeneity, Tau" = 0. est for overall effect. Z: 3.7 Urological Surgen bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) leterogeneity. Tau" = 0. est for overall effect. Z: 3.8 Pediatric surgery hang 2012	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538 .00; Chi ² = 11.47 = 1.54 (P = 0.12) y 0.01260504 0.10599078 .00; Chi ² = 32.22 = 1.25 (P = 0.21,	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.)	98 3321 104 3523 003); F= 83% 238 434 672 00001); F= 97%	6 11 17 1 29 3 46 49	2.0% 1.5% 2.0% 1.9% 5.4% 1.9% 3.8%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15]		-
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not appliest for overall effect. Z = 3.6 Gynecological suroniz 1994 urfly 2012 empen 1995 ubtotal (95% CI) leterogeneity. Tau" = 0. est for overall effect. Z = 3.7 Urological Surgery bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) leterogeneity. Tau" = 0. est for overall effect. Z = 3.8 Pediatric surgery hang 2012 l-Gohary 2010	urgery 0.00518583 icable = 2.46 (P = 0.01 rgery 0.1122449 0.00511894 0.00961538 .00; Chi ² = 11.47 = 1.54 (P = 0.12 y 0.01260504 0.10599078 .00; Chi ² = 32.22 = 1.25 (P = 0.21)	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.) 0.08944272 0.02443495	98 3321 104 3523 003); F = 83% 238 434 672 00001); F = 97%	3 46 49	2.0% 1.5% 2.0% 1.9% 5.4% 1.9% 3.8%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15]		
3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not appliest for overall effect. Z: 3.6 Gymecological surioniz 1994 uffly 2012 empen 1995 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z: 3.7 Urological Surgen bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z: 3.8 Pediatric surgery hang 2012 — Gohary 2010 endez-Gallart 2011	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538 .00; Chi² = 11.47 = 1.54 (P = 0.12, y 0.01260504 0.10599078 .00; Chi² = 32.22 = 1.25 (P = 0.21, 0.7627119 0.1	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.) 0.08944272 0.02443495 0.09486833	98 3321 104 3523 003); F = 83% 238 434 672 00001); F = 97%	3 46 49 1	2.0% 1.5% 2.0% 1.9% 5.4% 1.8% 3.8%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15] 0.20 [0.02, 0.38] 0.08 [0.03, 0.12] 0.10 [-0.09, 0.29]	_	
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3.5 Abdominal wall suringman 2005 ubtotal (95% CI) leterogeneity. Not appliest for overall effect. Z=3.6 Gynecological suriontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) leterogeneity. Tau² = 0. est for overall effect. Z=3.7 Urological Surgen bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) leterogeneity. Tau² = 0. est for overall effect. Z=3.8 Pediatric surgery hang 2012 l-Gohary 2010 emdez-Gallart 2011 urphy 2016 itchey 1993 owande 2011 ashijian 2007 sao 2007 an Elick 2008 /ang 1999 ubtotal (95% CI)	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538 .00; Chi² = 11.47 = 1.54 (P = 0.12 y 0.01260504 0.10599078 .00; Chi² = 32.22 = 1.25 (P = 0.21, 0.2013043 0.10144928 0.06858639 0.08058639 0.13636364 0.00723982 0.17687075 0.07	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.) 0.08944272 0.02443495 0.09488833 0.06289174 0.02570137 0.05078327 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.050787 0.050787 0.050787 0.050787	98 3321 104 3523 003); F = 83% 238 434 672 00001); F = 97% 20 118 10 46 138 1910 33 22 1105 147 100 3649	3 3 46 49 4 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.0% 1.5% 2.0% 1.9% 5.4% 1.9% 1.8% 0.6% 1.7% 0.5% 0.9% 1.1% 2.0% 1.5%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15] 0.20 [0.02, 0.38] 0.08 [0.03, 0.12] 0.10 [-0.09, 0.29] 0.24 [0.12, 0.36] 0.10 [0.05, 0.15] 0.07 [0.06, 0.08] 0.09 [-0.01, 0.19] 0.14 [-0.01, 0.28] 0.01 [0.00, 0.01] 0.18 [0.12, 0.24] 0.01 [0.00, 0.01] 0.18 [0.12, 0.24]		
3.5 Abdominal wall suringman 2005 ubtotal (95% C) leterogeneity. Not appliest for overall effect. Z: 3.6 Gynecological sur ontz 1994 uffly 2012 empen 1995 ubtotal (95% C) leterogeneity. Tau* = 0. sest for overall effect. Z: 3.7 Urological Surgery butotal (95% C) leterogeneity. Tau* = 0. sest for overall effect. Z: 3.8 Pediatric surgery hang 2012 Leohany 2010 leterogeneity. Tau* = 0. sest for overall effect. Z: 3.8 Pediatric surgery hang 2012 Leohany 2010 leterogeneity. Tau* = 0. sour 1996 littchey 1993 owande 2011 ashijian 2007 an Elick 2008 kang 1999 ubtotal (95% C) leterogeneity. Tau* = 0.	urgery 0.00518583 icable = 2.46 (P = 0.01, rgery 0.1122449 0.00511894 0.00961538 .00; Chi² = 11.47 = 1.54 (P = 0.12 y 0.01260504 0.10599078 .00; Chi² = 32.22 = 1.25 (P = 0.21, 0.2013043 0.10144928 0.06858639 0.08058639 0.13636364 0.00723982 0.17687075 0.07	0.00211161) 0.03188723 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.) 0.08944272 0.02443495 0.09488833 0.06289174 0.02570137 0.05078327 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.0507827 0.050787 0.050787 0.050787 0.050787	98 3321 104 35523 003); F= 83% 238 434 672 00001); F= 97% 20 118 1910 46 138 1910 33 22 1105 147 100 3649 0.00001); F= 94	11 17 17 129 3 466 49 4 9 1 11 11 13 3 8 26 7 217 %	2.0% 1.5% 2.0% 1.9% 5.4% 1.9% 1.8% 0.6% 1.7% 0.5% 0.9% 1.1% 2.0% 1.5%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15] 0.20 [0.02, 0.38] 0.08 [0.03, 0.12] 0.10 [-0.09, 0.29] 0.24 [0.12, 0.36] 0.10 [0.05, 0.15] 0.07 [0.06, 0.08] 0.09 [-0.01, 0.19] 0.14 [-0.01, 0.28] 0.01 [0.00, 0.01] 0.18 [0.12, 0.24] 0.01 [0.00, 0.01] 0.18 [0.12, 0.24]		
3.5 Abdominal wall standingman 2005 ubtotal (95% CI) eterogeneity. Not appliest for overall effect. Z= 3.6 Gynecological sur ontz 1994 uffly 2012 empen 1995 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z= 3.7 Urological Surgen bol-Enein 2001 arkarakis 2007 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z= 3.8 Pediatric surgery hang 2012 -Cohany 2010 endez-Gallart 2011 urphy 2006 out 1996 itchey 1993 owande 2011 ashijian 2007 san Eijik 2008 kang 1999 ubtotal (95% CI) eterogeneity. Tau² = 0. est for overall effect. Z=	urgery 0.00518583 icable = 2.46 (P = 0.01) rgery 0.1122449 0.00511894 0.00961538 .00; ChiF = 11.47 = 1.54 (P = 0.12) y 0.01260504 0.10599078 .00; ChiF = 32.22 = 1.25 (P = 0.21) 0.29313043 0.10144928 0.06858639 0.09090909 0.13636364 0.00723982 0.17687075 0.07 .00; ChiF = 161.0 = 5.03 (P < 0.00	0.00211161) 0.03188723 0.00123834 0.00123834 0.00956905 7, df = 2 (P = 0.) 0.00723151 0.01477611 2, df = 1 (P < 0.) 0.08944272 0.02443495 0.09486833 0.06289174 0.0570137 0.00578327 0.05004381 0.073165 0.00255038 0.03147048 0.0255038 0.03147040 0.0255038 0.03147040 0.0255038 0.03147040 0.0255147 0.0576161	98 3321 104 3523 003); F = 83% 238 434 672 00001); F = 97% 20 118 10 46 138 1910 33 22 1105 147 100 3649 0.00001); F = 94	111 177 1 299 3 3 466 449 4 9 9 1 1 1 1 1 1 1 1 1 1 1 1 3 3 3 8 26 7 217 % 10256	1.5% 2.0% 1.9% 5.4% 1.9% 5.4% 0.6% 1.8% 0.6% 1.6% 1.6% 1.1% 0.7% 2.16% 1.5% 1.6%	0.01 [0.00, 0.01] 0.11 [0.05, 0.17] 0.01 [0.00, 0.01] 0.01 [-0.01, 0.03] 0.02 [-0.01, 0.05] 0.01 [-0.00, 0.03] 0.11 [0.08, 0.13] 0.06 [-0.03, 0.15] 0.20 [0.02, 0.38] 0.08 [0.03, 0.15] 0.21 [0.05, 0.15] 0.24 [0.12, 0.36] 0.10 [0.06, 0.08] 0.09 [-0.01, 0.19] 0.14 [-0.01, 0.28] 0.01 [0.00, 0.01] 0.18 [0.12, 0.24] 0.07 [0.02, 0.13]	-0.5 -0.25	

3.4.1. Forest plot of the cummulative incidence of PSBO, stratified by surgical technique 8 studies excluded. Surgical technique not specified in 8 studies.

	Incidence	SE	Post operative Total		Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
.4.1 Laparotomy							
Aberg 2007	0.25531915	0.03180152	188	48	1.5%	0.26 [0.19, 0.32]	_
Abol-Enein 2001	0.01260504	0.00723151	238	3	2.0%	0.01 [-0.00, 0.03]	 -
Adachi 1995	0.43478261	0.10336653	23	10	0.4%	0.43 [0.23, 0.64]	-
Atiq 1993		0.07636035	35	10	0.7%	0.29 [0.14, 0.44]	
Beck 1999		0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]	-
Catena 2012		0.00234337	181	12	1.8%	0.07 [0.03, 0.10]	
Chang 2012		0.15491933	10	4	0.2%	0.40 [0.10, 0.70]	
Coran 1990		0.03363034	100	13	1.5%	0.13 [0.06, 0.20]	
Dasmahapatra 1991		0.03718489	45	3	1.4%	0.07 [-0.01, 0.14]	
Edna 1998	0.08686441	0.01296336	472	41	1.9%	0.09 [0.06, 0.11]	—
El-Gohary 2010	0.07627119	0.02443495	118	9	1.7%	0.08 [0.03, 0.12]	
Els 1993	0.12154696	0.02428802	181	22	1.7%	0.12 [0.07, 0.17]	_
Fan 2001	0.28571429	0.12073632	14	4	0.3%	0.29 [0.05, 0.52]	
Fazio 2006	0.11934156	0.00786045	1701	203	2.0%	0.12 [0.10, 0.13]	_
Hashimoto 2012		0.04166233	123	38	1.3%	0.31 [0.23, 0.39]	-
Hayashi 2008		0.02213494	144	11	1.7%	0.08 [0.03, 0.12]	
Mais 1998		0.03148648	95	10	1.5%	0.11 [0.04, 0.17]	
Montz 1994		0.03188723	98	11	1.5%	0.11 [0.05, 0.17]	L
Muffly 2012		0.00241833	1236	9	2.0%	0.01 [0.00, 0.01]	Ī
Murphy 2006		0.06289174	46	11	0.9%	0.24 [0.12, 0.36]	
Nelson 2006		0.00682874	458	10	2.0%	0.02 [0.01, 0.04]	-
Ng 2009	0.18918919	0.04552941	74	14	1.2%	0.19 [0.10, 0.28]	
Nieuwenhuijzen 1998	0.23931624	0.02789204	234	56	1.6%	0.24 [0.18, 0.29]	-
Nour 1996		0.02570137	138	14	1.7%	0.10 [0.05, 0.15]	
Ragni 1996		0.02150154	46	1	1.8%	0.02 [-0.02, 0.06]	+
Ritchey 1993		0.00578327	1910	131	2.0%	0.07 [0.06, 0.08]	_
•							
3aklani 2012		0.01859876	187	13	1.8%	0.07 [0.03, 0.11]	
3alum 2001		0.01065803	438	23	2.0%	0.05 [0.03, 0.07]	—
Scholin 2011		0.01178875	403	24	1.9%	0.06 [0.04, 0.08]	—
Bileri 2008	0.19202899	0.02370974	276	53	1.7%	0.19 [0.15, 0.24]	
Bowande 2011	0.09090909	0.05004381	33	3	1.1%	0.09 [-0.01, 0.19]	
Talwar 1997	0.21428571	0.05483211	56	12	1.0%	0.21 [0.11, 0.32]	
Tashjian 2007	0.13636364	0.073165	22	3	0.7%	0.14 [-0.01, 0.28]	-
Гауlor 2006		0.00800084	444	13	2.0%	0.03 [0.01, 0.04]	
гауlor 2010 Гауlor 2010		0.01503228	131	4	1.9%	0.03 [0.00, 0.06]	
•							L
Гsao 2007	0.01467505	0.0055058	477	7	2.0%	0.01 [0.00, 0.03]	
/an Eijck 2008	0.17687075	0.03147048	147	26	1.5%	0.18 [0.12, 0.24]	
				_			
-	0.07	0.0255147	100 29534	7 4 793	1.7% 57.9 %	0.07 [0.02, 0.12] 0.12 [0.09, 0.15]	•
/Vang 1999 Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z∃	01; Chi² = 3315	5.50, df= 37 (P	29534	4793			•
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z =	01; Chi² = 3315	5.50, df= 37 (P	29534	4793			•
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy	01; Chi²= 3316 = 7.31 (P < 0.00	5.50, df = 37 (P 0001)	29534 < 0.00001); I ² = 9	4793 99%	57.9%	0.12 (0.09, 0.15)	•
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577	5.50, df = 37 (P 0001) 0.01157062	29534 < 0.00001); ² = 9	4793 39% 63	57.9 %	0.12 (0.09, 0.15) 0.10 (0.07, 0.12)	•
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603	5.50, df = 37 (P 0001) 0.01157062 0.01009761	29534 < 0.00001); I ² = 9 652 463	4793 39% 63 23	57.9 % 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07)	*
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005	01; Chi²= 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161	29534 < 0.00001); I ² = 9 652 463 1157	4793 39% 63 23 6	2.0% 2.0% 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07) 0.01 (0.00, 0.01)	-
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184	29534 < 0.00001); ² = 9 652 463 1157 530	4793 39% 63 23 6 26	2.0% 2.0% 2.0% 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07) 0.01 (0.00, 0.01) 0.05 (0.03, 0.07)	- - -
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161	29534 < 0.00001); I ² = 9 652 463 1157	4793 39% 63 23 6	2.0% 2.0% 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07) 0.01 (0.00, 0.01)	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184	29534 < 0.00001); ² = 9 652 463 1157 530	4793 39% 63 23 6 26	2.0% 2.0% 2.0% 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07) 0.01 (0.00, 0.01) 0.05 (0.03, 0.07)	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908	29534 < 0.00001); ² = 9 652 463 1157 530 697	4793 39% 63 23 6 26 68	2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 (0.09, 0.15) 0.10 (0.07, 0.12) 0.05 (0.03, 0.07) 0.01 (0.00, 0.01) 0.05 (0.03, 0.07) 0.10 (0.08, 0.12)	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0	29534 < 0.00001); I ² = 9 652 463 1157 530 697 597 10	4793 399% 63 23 6 26 68 13 0	2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0	0.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0	29534 < 0.00001); I ² = 9 652 463 1157 530 697 597 10 1400	4793 399% 63 23 6 26 68 13 0 21	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0 0.015 0.0491018	0.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778	29534 < 0.00001); I ² = 9 652 463 1157 530 697 597 10 1400 835	4793 399% 63 23 6 26 68 13 0 21 41	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Funabushanam 2009 Hwang 2004	01; Chi ² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0 0.015 0.0491018 0.04008746	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594	29534 < 0.00001); IF = 9 662 463 1157 530 697 597 10 1400 835 1372	4793 99% 63 23 6 26 68 13 0 21 41 55	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0 0.015 0.0491018 0.04008746 0.15789474	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468	29534 < 0.00001); IF = 9 652 463 1157 530 697 597 10 1400 835 1372 19	4793 399% 63 23 6 26 68 13 0 21 41 55 3	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0 0.015 0.0491018 0.04008746 0.15789474 0.03896104	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285	29534 < 0.00001); IF = 9 652 463 1157 530 697 10 1400 835 1372 19 154	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0.015 0.0491018 0.04008746 0.15789474 0.03896104 0.01298701	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022	29534 < 0.00001); IF = 9 652 463 1157 530 697 10 1400 835 1372 19 154 847	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0.015 0.0491018 0.04008746 0.15789474 0.03896104 0.01298701	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285	29534 < 0.00001); IF = 9 652 463 1157 530 697 10 1400 835 1372 19 154	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04008746 0.15789474 0.03896104 0.01298701 0.00416667	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022	29534 < 0.00001); IF = 9 652 463 1157 530 697 10 1400 835 1372 19 154 847	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773	5.50, df = 37 (P 0.011) 0.01157062 0.01009761 0.00211161 0.0038884 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061	29534 < 0.00001); IF = 9 652 463 1157 530 697 10 1400 835 1372 19 154 847 720	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Myashiro 2010 Muffly 2012 Nelson 2006 Ng 2009	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.0038184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097	29534 < 0.00001); F= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.0038184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764	29534 < 0.00001); F= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.05 0.0491018 0.04008746 0.015789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.0038184 0.01123908 0.00597333 0.00597333 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574	29534 < 0.00001); P= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.01 [0.01, 0.02]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Lapar oscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rosin 2007	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.015 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0.00597333 0.00747778 0.00529594 0.003865468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574 0.00181574	29534 < 0.00001); F= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.01, 0.02] 0.04 [0.02, 0.06] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Lapar oscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rosin 2007 Saklani 2012	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.041018 0.04008746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04166667	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00321880 0.00597333 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00380622 0.00240061 0.01083721 0.01182764 0.00181574 0.00181574 0.01152984 0.01665219	29534 < 0.00001); P= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Myashiro 2010 Myafly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Baklani 2012 Bcholin 2012	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.041606 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04438642	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00321880 0.00597333 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.0038022 0.00240061 0.01083721 0.01182764 0.00181574 0.00181574 0.01152984 0.01665219 0.01052366	29534 < 0.00001); P= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Nel 2009 Parakh 2007 Rogula 2007 Rosin 2007 Baklani 2012 Bcholin 2011 Faylor 2010	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04438642 0.025	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.01182984 0.01665219 0.01052366 0.00933025	29534 < 0.00001); F = 9 662 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17 7	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.02, 0.07] 0.04 [0.01, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Lapar oscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rosin 2007 Saklani 2012	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04438642 0.025	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00321880 0.00597333 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.0038022 0.00240061 0.01083721 0.01182764 0.00181574 0.00181574 0.01152984 0.01665219 0.01052366	29534 < 0.00001); P= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.02] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = S.4.2 Laparoscopy Subasbassi 2011 Blachar 2002 Bringman 2005 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Funabushanam 2009 Hwang 2004 Chaitan 2003 Lumley 2002 Muffly 2012 Selson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rogula 2007 Rosin 2007 Saklani 2012 Scholin 2011 Taylor 2010	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.0490566 0.09756098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04438642 0.025	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.01182984 0.01665219 0.01052366 0.00933025	29534 < 0.00001); F = 9 662 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17 7	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.07] 0.04 [0.01, 0.07] 0.04 [0.01, 0.07] 0.04 [0.02, 0.07] 0.04 [0.01, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = S.4.2 Laparoscopy Subasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Chaitan 2003 Lumley 2002 Muffly 2012 Selson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rogula 2007 Rosin 2010 Saklani 2012 Scholin 2011 Saylor 2010 Fao 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0.	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04166667 0.04438642 0.025 0.00159236	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574 0.01152984 0.01652366 0.00933025 0.00159109	29534 < 0.00001); F= 9 652 463 1157 530 697 597 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280 628 15347	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 40 13 40 17 7 1 449	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.01 [0.01, 0.02] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.03 [0.01, 0.04] 0.00 [-0.00, 0.00]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Gunabushanam 2009 Hwang 2014 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rosin 2007 Baklani 2012 Scholin 2011 Faylor 2010 Fesao 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z =	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04166667 0.04438642 0.025 0.00159236	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574 0.01152984 0.01652366 0.00933025 0.00159109	29534 < 0.00001); F = 9 652 463 1157 530 697 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280 628 15347 < 0.000001); F = 9	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17 7 1 449 3%	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.05 [0.01, 0.04] 0.00 [-0.00, 0.00] 0.03 [0.01, 0.04]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2004 Khaitan 2003 Lumley 2002 Miyashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rogula 2007 Baklani 2012 Boholin 2011 Faylor 2010 Fsao 2007 Subtotal (95% CI) Heterogeneity: Tau² = 0.	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.049056098 0.02177554 0.0491018 0.04908746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04248366 0.04166667 0.04438642 0.025 0.00159236	5.50, df = 37 (P 0001) 0.01157062 0.01009761 0.00211161 0.00938184 0.01123908 0.00597333 0 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574 0.01152984 0.01652366 0.00933025 0.00159109	29534 < 0.00001); F = 9 652 463 1157 530 697 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280 628 15347 < 0.000001); F = 9	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17 7 1 449 3%	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.32] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.00 [-0.00, 0.01] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.01 [0.01, 0.02] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.03 [0.01, 0.04] 0.00 [-0.00, 0.00]	
Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z = 2.4.2 Laparoscopy Abasbassi 2011 Blachar 2002 Bringman 2005 Cabot 2010 Capella 2006 Champion 2003 Chang 2012 Cho 2006 Bunabushanam 2009 Hwang 2014 Khaitan 2003 Lumley 2002 Myashiro 2010 Muffly 2012 Nelson 2006 Ng 2009 Parakh 2007 Rogula 2007 Rogula 2007 Rosin 2011 Faylor 2010 Fisao 2017 Subtotal (95% CI) Heterogeneity: Tau² = 0. Fest for overall effect: Z =	01; Chi² = 3315 = 7.31 (P < 0.00 0.09662577 0.04967603 0.00518583 0.04905609 0.02177554 0.0491018 0.04008746 0.15789474 0.03896104 0.01298701 0.00416667 0.0398773 0.02702703 0.03793103 0.01155068 0.04428366 0.04166667 0.04438642 0.025 0.00159236	5.50, df = 37 (P 0.001) 0.01157062 0.01009761 0.00211161 0.0038184 0.01123908 0.00597333 0.00324863 0.00747778 0.00529594 0.08365468 0.01559285 0.00389022 0.00240061 0.01083721 0.01885097 0.01121764 0.00181574 0.01152984 0.01665219 0.0016933025 0.000159109 15, df = 21 (P < 0001)	29534 < 0.00001); F= 9 652 463 1157 530 697 10 1400 835 1372 19 154 847 720 326 74 290 3463 306 144 383 280 628 15347 < 0.00001); F= 9	4793 39% 63 23 6 26 68 13 0 21 41 55 3 6 11 3 13 2 11 40 13 6 17 7 1 449 3%	2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	0.12 [0.09, 0.15] 0.10 [0.07, 0.12] 0.05 [0.03, 0.07] 0.01 [0.00, 0.01] 0.05 [0.03, 0.07] 0.10 [0.08, 0.12] 0.02 [0.01, 0.03] Not estimable 0.01 [0.01, 0.02] 0.05 [0.03, 0.06] 0.04 [0.03, 0.05] 0.16 [-0.01, 0.02] 0.04 [0.01, 0.07] 0.01 [0.01, 0.02] 0.04 [0.02, 0.06] 0.03 [-0.01, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.06] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.04 [0.02, 0.07] 0.05 [0.01, 0.04] 0.00 [-0.00, 0.00] 0.03 [0.01, 0.04]	

3.4.2. Forest plots of the incidence of PSBO compared between laparoscopy and laparotomy

	Laparoscopy Lapa		Laparot	omy		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Bartels 2012	199	5	208	14		Not estimable	
Chang 2012	0	10	2	10	6.0%	0.16 [0.01, 3.85]	
Eshuis 2010	1	29	1	26	7.2%	0.89 [0.05, 15.04]	-
Majewski 2005	1	64	7	91	10.9%	0.19 [0.02, 1.59]	
Nelson 2006	1	326	4	458	10.4%	0.35 [0.04, 3.14]	
Ng 2009	0	74	5	74	6.9%	0.08 [0.00, 1.56]	
Saklani 2012	3	144	5	187	17.0%	0.77 [0.18, 3.30]	
Scholin 2011	11	383	8	403	23.9%	1.46 [0.58, 3.67]	
Stanton 2010	0	170	3	62	6.6%	0.05 [0.00, 0.98]	
Tsao 2007	1	628	6	477	10.9%	0.13 [0.02, 1.04]	-
Total (95% CI)		1833		1802	100.0%	0.38 [0.16, 0.91]	•
Total events	217		249				
Heterogeneity: Tau ^z =	0.58; Chi²	= 12.69	9, df = 8 (F	P = 0.12); I ^z = 37%	6	
Test for overall effect:	Z = 2.19 (F	P = 0.03)				0.01 0.1 1 10 100 Favours laparotomy

3.5.1. Sensitivity analysis of the incidence of PSBO, impact of individual studies

3.5.1. Sensitivity analysis of the incidence of PS	. 1	
Study	Point estimate	95%CI
All available studies	0.09	0.07-0.10
Abasbassi 2011	0.09	0.07-0.10
Aberg 2007	0.09	0.07-0.10
Abol-Enein 2001	0.09	0.07-0.10
Adachi 1995	0.09	0.07-0.10
Atiq 1993	0.09	0.07-0.10
Beck 1999	0.09	0.07-0.10
Blachar 2002	0.09	0.07-0.10
Bringman 2005	0.09	0.07-0.10
Cabot 2010	0.09	0.07-0.10
Capella 2006	0.09	0.07-0.10
Catena 2012	0.09	0.07-0.10
Champion 2003	0.09	0.07-0.10
Chang 2012	0.09	0.07-0.10
Cho 2006	0.09	0.07-0.10
Coran 1990	0.09	0.07-0.10
Dasmahapatra 1991	0.09	0.07-0.10
Edna 1998	0.09	0.07-0.10
El-Gohary 2010	0.09	0.07-0.10
Els 1993	0.09	0.07-0.10
Fan 2001	0.09	0.07-0.10
Fan 2001 Fazio 2006	0.09	
		0.07-0.10
Gunabushanam 2009	0.09	0.07-0.10
Hashimoto 2012	0.09	0.07-0.10
Hayashi 2008	0.09	0.07-0.10
Hwang 2004	0.09	0.07-0.10
Khaitan 2003	0.09	0.07-0.10
Lee 2012	0.09	0.07-0.10
Leung 2009	0.09	0.07-0.10
Lumley 2002	0.09	0.07-0.10
MacLean 2002	0.09	0.07-0.10
Mais 1998	0.09	0.07-0.10
Mendez-Gallart 2011	0.09	0.07-0.10
Miyashiro 2010	0.09	0.07-0.10
Montz 1994	0.09	0.07-0.10
Muffly 2012	0.09	0.07-0.11
Murphy 2006	0.09	0.07-0.10
Nelson 2006	0.09	0.07-0.10
Ng 2009	0.09	0.07-0.10
Nieuwenhuijzen 1998	0.09	0.07-0.10
Nour 1996	0.09	0.07-0.10
Parakh 2007	0.09	0.07-0.10
Parikh 2008	0.09	0.07-0.10
Ragni 1996	0.09	0.07-0.10
Rempen 1995	0.09	0.07-0.10
Ritchey 1993	0.09	0.07-0.10
Rogula 2007	0.09	0.07-0.11
Rosin 2007	0.09	0.07-0.10
Saklani 2012	0.09	0.07-0.10
Salum 2001	0.09	0.07-0.10
Scholin 2011	0.09	0.07-0.10
Sileri 2008	0.09	0.07-0.10
Sowande 2011	0.09	0.07-0.10
	0.09	
Talwar 1997		0.07-0.10
Tashjian 2007	0.09	0.07-0.10
Taylor 2006	0.09	0.07-0.10
Taylor 2010	0.09	0.07-0.10
Tsao 2007	0.09	0.07-0.10
T:: 1 2000	1 () ()()	0.07-0.10
van Eijck 2008	0.09	
Varkarakis 2007	0.09	0.07-0.10
y .		

3.6.1. Sensitivity analysis of the incidence of PSBO, stratified by quality of study

Study or Subgroup	Incidence	SE	Postoperative Total		Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
2.6.1 Low quality studies		JL	rotal	, ottal	orgin	,	,
Abasbassi 2011		0.01157062	652	63	1.9%	0.10 [0.07, 0.12]	-
Blachar 2002		0.01009761	463	23	1.9%	0.05 [0.03, 0.07]	-
Cho 2006		0.00324863	1400	21	2.0%	0.01 [0.01, 0.02]	-
Gunabushanam 2009		0.00747778	835	41	1.9%	0.05 [0.03, 0.06]	_
							_
Parakh 2007		0.01121764	290	11	1.9%	0.04 [0.02, 0.06]	
Ragni 1996		0.02150154	46	1	1.7%	0.02 [-0.02, 0.06]	T
Rempen 1995		0.00956905	104	1	1.9%	0.01 [-0.01, 0.03]	<u> </u>
3owande 2011	0.09090909	0.05004381	33	3	1.1%	0.09 [-0.01, 0.19]	
alwar 1997	0.21428571	0.05483211	56	12	1.0%	0.21 [0.11, 0.32]	
'amataka 1997	0.05	0.01406829	240	12	1.9%	0.05 [0.02, 0.08]	
Subtotal (95% CI)			4119	188	17.3%	0.05 [0.03, 0.07]	♦
leterogeneity: Tau² = 0.0			00001); l²= 899	6			
est for overall effect: Z=		JUU1)					
.6.2 Intermediate qualit				_			
bol-Enein 2001		0.00723151	238	3	1.9%	0.01 [-0.00, 0.03]	
kdachi 1995	0.43478261	0.10336653	23	10	0.5%	0.43 [0.23, 0.64]	_
ktiq 1993	0.28571429	0.07636035	35	10	0.7%	0.29 [0.14, 0.44]	
Beck 1999	0.20658841	0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]	-
Bringman 2005	0.00518583	0.00211161	1157	6	2.0%	0.01 [0.00, 0.01]	· ·
abot 2010		0.00938184	530	26	1.9%	0.05 [0.03, 0.07]	-
apella 2006		0.01123908	697	68	1.9%	0.10 [0.08, 0.12]	-
•			597				_
hampion 2003		0.00597333		13	2.0%	0.02 [0.01, 0.03]	<u></u>
hang 2012		0.08944272	20	4	0.6%	0.20 [0.02, 0.38]	
oran 1990		0.03363034	100	13	1.5%	0.13 [0.06, 0.20]	
asmahapatra 1991		0.03718489	45	3	1.4%	0.07 [-0.01, 0.14]	
dna 1998	0.08686441	0.01296336	472	41	1.9%	0.09 [0.06, 0.11]	-
l-Gohary 2010	0.07627119	0.02443495	118	9	1.7%	0.08 [0.03, 0.12]	
Is 1993		0.02428802	181	22	1.7%	0.12 [0.07, 0.17]	
an 2001		0.12073632	14	4	0.4%	0.29 [0.05, 0.52]	
lashimoto 2012		0.04166233	123	38	1.3%	0.31 [0.23, 0.39]	
							_
lwang 2004		0.00529594	1372	55	2.0%	0.04 [0.03, 0.05]	
(haitan 2003		0.08365468	19	3	0.6%	0.16 [-0.01, 0.32]	
.ee 2012	0.06986028	0.00805296	1002	70	1.9%	0.07 [0.05, 0.09]	-
eung 2009.	0.02813731	0.00392283	1777	50	2.0%	0.03 [0.02, 0.04]	-
umley 2002	0.03896104	0.01559285	154	6	1.8%	0.04 [0.01, 0.07]	
MacLean 2002	0.25138632	0.01318822	1082	272	1.9%	0.25 [0.23, 0.28]	_
Mais 1998		0.03148648	95	10	1.5%	0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833	10	1	0.5%	0.10 [-0.09, 0.29]	
Miyashiro 2010		0.00389022	847	11	2.0%	0.01 [0.01, 0.02]	_
•							
Montz 1994		0.03188723	98	11	1.5%	0.11 [0.05, 0.17]	
Murphy 2006		0.06289174	46	11	0.9%	0.24 [0.12, 0.36]	
Nelson 2006		0.00627504	784	25	2.0%	0.03 [0.02, 0.04]	-
Ng 2009	0.10810811	0.02552433	148	16	1.7%	0.11 [0.06, 0.16]	
Nieuwenhuijzen 1998	0.23931624	0.02789204	234	56	1.6%	0.24 [0.18, 0.29]	
Nour 1996	0.10144928	0.02570137	138	14	1.7%	0.10 [0.05, 0.15]	—
Ritchey 1993	0.06858639	0.00578327	1910	131	2.0%	0.07 [0.06, 0.08]	-
Rogula 2007		0.00181574	3463	40	2.0%	0.01 [0.01, 0.02]	-
Rosin 2007		0.01152984	306	13	1.9%	0.04 [0.02, 0.07]	_
							_
Balum 2001		0.01065803	438	23	1.9%	0.05 [0.03, 0.07]	-
Scholin 2011		0.00793115	786	41	1.9%	0.05 [0.04, 0.07]	-
Bileri 2008		0.02370974	276	53	1.7%	0.19 [0.15, 0.24]	
ashjian 2007	0.13636364	0.073165	22	3	0.8%	0.14 [-0.01, 0.28]	
aylor 2006	0.02927928	0.00800084	444	13	1.9%	0.03 [0.01, 0.04]	
Taylor 2010		0.00796093	411	11	1.9%	0.03 [0.01, 0.04]	-
sao 2007		0.00255038	1105	8	2.0%	0.01 [0.00, 0.01]	-
an Eijck 2008		0.00233030	147	26	1.5%		
•						0.18 [0.12, 0.24]	`
/arkarakis 2007		0.01477611	434	46	1.9%	0.11 [0.08, 0.13]	
Vang 1999	0.07	0.0255147	100	7 5202	1.7%	0.07 [0.02, 0.12]	
i ubtotal (95% CI) leterogeneity: Tau² = 0.0	00; Chi² = 4574	4.18, df= 43 (P	40910 < 0.00001); I ² =	5203 99%	69.8%	0.10 [0.07, 0.12]	•
est for overall effect: Z=	•						
.6.3 High quality studies		0.004.004.50	400	40	4 500	0.2610.40.0.22	
berg 2007		0.03180152	188	48	1.5%	0.26 [0.19, 0.32]	
Catena 2012		0.01849337	181	12	1.8%	0.07 [0.03, 0.10]	—
azio 2006	0.11934156	0.00786045	1701	203	1.9%	0.12 [0.10, 0.13]	-
Hayashi 2008	0.07638889	0.02213494	144	11	1.7%	0.08 [0.03, 0.12]	
Muffly 2012		0.00123834	3321	17	2.0%	0.01 [0.00, 0.01]	+
Parikh 2008		0.00137019	46798	4555	2.0%	0.10 [0.09, 0.10]	
				4000			
Baklani 2012 Bubtotal (95% CI)	0.00740181	0.01278533	331 52664		1.9%	0.06 [0.03, 0.08]	🛋
Subtotal (95% CI) Heterogeneity: Tau² = 0.0	00; Chi² = 2623	3.44, df = 6 (P <	52664 0.00001); l² = 1	4865 00%	12.8%	0.09 [0.04, 0.14]	
est for overall effect: Z=	•		.,				
							I
otal (95% CI)			97693	10256	100.0%	0.09 [0.07, 0.10]	♦
f otal (95% CI) Heterogeneity: Tau² = 0.0	00; Chi² = 7362	2.88, df= 60 (P			100.0%	0.09 [0.07, 0.10] —	-0.2 -0.1 0 0.1 0.2

3.6.2 Table of Sensitivity analysis of the incidence of PSBO, impact of quality of studies

Study	Point estimate	95%CI
All available studies	0.09	0.07-0.10
Low Quality studies only	0.05	0.03-0.07
Intermediate Quality studies only	0.10	0.07-0.12
High studies only	0.09	0.04-0.14

3.7.1. Sensitivity analysis of the incidence of PSBO, stratified by study design

5.7.1. Sensitivity at	narysis or t		Postoperative		iiiieu b	Incidence	Incidence
Study or Subgroup	Incidence	SE	Total		Weight	IV, Random, 95% CI	IV, Random, 95% CI
2.7.1 Retrospective stu	dies						
Abasbassi 2011	0.09662577	0.01157062	652	63	1.9%	0.10 [0.07, 0.12]	_
Aberg 2007		0.03180152	188	48	1.5%	0.26 [0.19, 0.32]	
Abol-Enein 2001		0.00723151	238	3	1.9%	0.01 [-0.00, 0.03]	Γ.
Adachi 1995		0.10336653	23	10	0.5%	0.43 [0.23, 0.64]	
Beck 1999		0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]	_
Blachar 2002 Bringman 2005		0.01009761 0.00211161	463 1157	23 6	1.9% 2.0%	0.05 [0.03, 0.07] 0.01 [0.00, 0.01]	
Capella 2006		0.00211101	697	68	1.9%	0.10 [0.08, 0.12]	_
Champion 2003		0.00597333	597	13	2.0%	0.02 [0.01, 0.03]	_
Chang 2012		0.08944272	20	4	0.6%	0.20 [0.02, 0.38]	
Cho 2006		0.00324863	1400	21	2.0%	0.01 [0.01, 0.02]	-
Coran 1990	0.13	0.03363034	100	13	1.5%	0.13 [0.06, 0.20]	
Dasmahapatra 1991		0.03718489	45	3	1.4%	0.07 [-0.01, 0.14]	
Edna 1998		0.01296336	472	41	1.9%	0.09 [0.06, 0.11]	_
El-Gohary 2010		0.02443495	118	9	1.7%	0.08 [0.03, 0.12]	
Els 1993		0.02428802	181	22	1.7%	0.12 [0.07, 0.17]	- ,
Fan 2001		0.12073632	14	4	0.4%	0.29 [0.05, 0.52]	
Gunabushanam 2009		0.00747778 0.00529594	835 1372	41 55	1.9% 2.0%	0.05 [0.03, 0.06] 0.04 [0.03, 0.05]	
Hwang 2004 Khaitan 2003		0.00329394	1372	3	0.6%	0.16 [-0.01, 0.32]	
Leung 2009		0.00303400	1777	50	2.0%	0.03 [0.02, 0.04]	-
MacLean 2002		0.01318822	1082	272	1.9%	0.25 [0.23, 0.28]	
Mais 1998		0.03148648	95	10	1.5%	0.11 [0.04, 0.17]	
Mendez-Gallart 2011		0.09486833	10	1	0.5%	0.10 [-0.09, 0.29]	
Miyashiro 2010	0.01298701	0.00389022	847	11	2.0%	0.01 [0.01, 0.02]	-
Montz 1994	0.1122449	0.03188723	98	11	1.5%	0.11 [0.05, 0.17]	
Muffly 2012	0.00511894	0.00123834	3321	17	2.0%	0.01 [0.00, 0.01]	•
Murphy 2006		0.06289174	46	11	0.9%	0.24 [0.12, 0.36]	
Nieuwenhuijzen 1998		0.02789204	234	56	1.6%	0.24 [0.18, 0.29]	
Nour 1996		0.02570137	138	14	1.7%	0.10 [0.05, 0.15]	
Parakh 2007		0.01121764	290	11	1.9%	0.04 [0.02, 0.06]	<u> </u>
Parikh 2008		0.00137019 0.02150154	46798 46	4555 1	2.0% 1.7%	0.10 [0.09, 0.10]	
Ragni 1996 Rempen 1995		0.00956905	104	1	1.7%	0.02 [-0.02, 0.06] 0.01 [-0.01, 0.03]	_
Ritchey 1993		0.00578327	1910	131	2.0%	0.07 [0.06, 0.08]	_
Rogula 2007		0.00181574	3463	40	2.0%	0.01 [0.01, 0.02]	<u>-</u>
Saklani 2012		0.01278533	331	19	1.9%	0.06 [0.03, 0.08]	
Salum 2001		0.01065803	438	23	1.9%	0.05 [0.03, 0.07]	-
Scholin 2011	0.05216285	0.00793115	786	41	1.9%	0.05 [0.04, 0.07]	-
Sowande 2011	0.09090909	0.05004381	33	3	1.1%	0.09 [-0.01, 0.19]	
Tashjian 2007	0.13636364	0.073165	22	3	0.8%	0.14 [-0.01, 0.28]	
Taylor 2006		0.00800084	444	13	1.9%	0.03 [0.01, 0.04]	_
Taylor 2010		0.00796093	411	11	1.9%	0.03 [0.01, 0.04]	-
Tsao 2007		0.00255038	1105	8	2.0%	0.01 [0.00, 0.01]	Ī
van Eijck 2008		0.03147048	147	26	1.5%	0.18 [0.12, 0.24]	
Varkarakis 2007		0.01477611	434	46 7	1.9%	0.11 [0.08, 0.13]	
Wang 1999 Yamataka 1997	0.07	0.0255147 0.01406829	100 240	12	1.7% 1.9%	0.07 [0.02, 0.12] 0.05 [0.02, 0.08]	<u> </u>
Subtotal (95% CI)	0.03	0.01400028	92253	9761	78.6%	0.08 [0.06, 0.10]	•
Heterogeneity: Tau ² = 0.	$00^{\circ} \text{ Chi}^2 = 7139$	95 df = 47 (F				5.55 [5.65, 5.75]	•
Test for overall effect: Z=	•		0.000017,1	0070			
		,					
2.7.2 Prospective							
Atiq 1993		0.07636035	35	10	0.7%	0.29 [0.14, 0.44]	
Cabot 2010		0.00938184	530	26	1.9%	0.05 [0.03, 0.07]	-
Catena 2012		0.01849337	181	12	1.8%	0.07 [0.03, 0.10]	
Fazio 2006		0.00786045	1701	203	1.9%	0.12 [0.10, 0.13]	
Hashimoto 2012		0.04166233	123	38	1.3%	0.31 [0.23, 0.39]	_
Hayashi 2008		0.02213494	144	11	1.7%	0.08 [0.03, 0.12]	
Lee 2012 Lumley 2002		0.00805296 0.01559285	1002 154	70 6	1.9% 1.8%	0.07 [0.05, 0.09] 0.04 [0.01, 0.07]	
Nelson 2006		0.00627504	784	25	2.0%	0.03 [0.02, 0.04]	-
Ng 2009		0.00027304	148	16	1.7%	0.11 [0.06, 0.16]	
Rosin 2007		0.02352433	306	13	1.9%	0.04 [0.02, 0.07]	
Sileri 2008		0.02370974	276	53	1.7%	0.19 [0.15, 0.24]	
Talwar 1997		0.05483211	56	12	1.0%	0.21 [0.11, 0.32]	
Subtotal (95% CI)			5440	495	21.4%	0.10 [0.07, 0.13]	◆
Heterogeneity: Tau² = 0.	00; Chi² = 166.	91, df = 12 (P	< 0.00001); I² = 9	13%			
Test for overall effect: Z =	= 7.01 (P < 0.00	0001)					
T-4-1/05** 0"				400	400.000	0.0010.00	•
Total (95% CI)					100.0%	0.09 [0.07, 0.10]	
Heterogeneity: Tau ² = 0.	•		′ < 0.00001); l² =	99%			-0.2 -0.1 0 0.1 0.2
Test for overall effect: Z = Test for subgroup differe			0.26) 13 - 24 42	۵			Incidence
restror sunding hillett	snices. OIII = 1	.52, ui – 1 (F =	0.20), 1 - 24.47	v			

3.7.2. Table of sensitivity analysis of the incidence of PSBO, impact of study design

Study	Point estimate	95% CI
All studies included	0.09	0.07-0.10
Retrospective studies only	0.08	0.06-0.10
Prospective studies only	0.10	0.07-0.13

$3.8.1. \ Sensitivity \ analysis \ of \ the \ \ incidence \ of PSBO, \ stratified \ by \ publication \ date \\ {\color{red}\textbf{Postoperative}} \ \ {\color{red}\textbf{PSBO}} \ \ \ \ {\color{red}\textbf{Incidence}}$

3.8.1. Sensitivity ai	nalysis of t				iiiea b		
Study or Subgroup	Incidence	SE	Postoperative Total		Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
2.8.1 Studies published			rotta	rotui	worgin	TV, Turidotti, 00% CI	10,10010,00%
Adachi 1995	_	0.10336653	23	10	0.5%	0.43 [0.23, 0.64]	
Atiq 1993		0.07636035	35	10	0.7%	0.29 [0.14, 0.44]	_
Beck 1999	0.20658841	0.00294397	18912	3907	2.0%	0.21 [0.20, 0.21]	
Coran 1990	0.13	0.03363034	100	13	1.5%	0.13 [0.06, 0.20]	—
Dasmahapatra 1991	0.06666667	0.03718489	45	3	1.4%	0.07 [-0.01, 0.14]	 -
Edna 1998		0.01296336	472	41	1.9%	0.09 [0.06, 0.11]	~
Els 1993		0.02428802	181	22	1.7%	0.12 [0.07, 0.17]	_
Mais 1998		0.03148648	95	10	1.5%	0.11 [0.04, 0.17]	
Montz 1994		0.03188723	98	11	1.5%	0.11 [0.05, 0.17]	
Nieuwenhuijzen 1998 Nour 1996		0.02789204 0.02570137	234 138	56 14	1.6% 1.7%	0.24 [0.18, 0.29] 0.10 [0.05, 0.15]	
Ragni 1996		0.02570157	46	1	1.7%	0.02 [-0.02, 0.06]	_
Rempen 1995		0.00956905	104	1	1.9%	0.01 [-0.01, 0.03]	+
Ritchey 1993		0.00578327	1910	131	2.0%	0.07 [0.06, 0.08]	-
Talwar 1997	0.21428571	0.05483211	56	12	1.0%	0.21 [0.11, 0.32]	
Wang 1999	0.07	0.0255147	100	7	1.7%	0.07 [0.02, 0.12]	
Yamataka 1997	0.05	0.01406829	240	12	1.9%	0.05 [0.02, 0.08]	- _
Subtotal (95% CI)			22789	4261	26.1%	0.12 [0.07, 0.17]	•
Heterogeneity: Tau ² = 0.	•		< 0.00001); I² = 9	8%			
Test for overall effect: Z =	= 4.95 (P < 0.00	0001)					
2.8.2 Studies published	in the year 20	00 and later					
Abasbassi 2011	_	0.01157062	652	82	1.9%	0.10 [0.07, 0.12]	_
Abasbassi 2011 Aberg 2007		0.01157062	188	63 48	1.5%	0.10 [0.07, 0.12]	
Abol-Enein 2001	0.25531915		238	40 3	1.9%	0.26 [0.19, 0.32]	<u> </u>
Blachar 2002		0.00723131	463	23	1.9%	0.01 [0.03, 0.03]	-
Bringman 2005		0.00211161	1157	6	2.0%	0.01 [0.00, 0.01]	.
Cabot 2010		0.00938184	530	26	1.9%	0.05 [0.03, 0.07]	-
Capella 2006	0.09756098	0.01123908	697	68	1.9%	0.10 [0.08, 0.12]	-
Catena 2012	0.06629834	0.01849337	181	12	1.8%	0.07 [0.03, 0.10]	-
Champion 2003	0.02177554	0.00597333	597	13	2.0%	0.02 [0.01, 0.03]	-
Chang 2012		0.08944272	20	4	0.6%	0.20 [0.02, 0.38]	
Cho 2006		0.00324863	1400	21	2.0%	0.01 [0.01, 0.02]	ľ
El-Gohary 2010		0.02443495	118	9	1.7%	0.08 [0.03, 0.12]	<u> </u>
Fan 2001		0.12073632	14	202	0.4%	0.29 [0.05, 0.52]	
Fazio 2006 Gunabushanam 2009		0.00786045 0.00747778	1701 835	203 41	1.9% 1.9%	0.12 [0.10, 0.13]	
Hashimoto 2012		0.00747778	123	38	1.3%	0.05 [0.03, 0.06] 0.31 [0.23, 0.39]	
Hayashi 2008		0.02213494	144	11	1.7%	0.08 [0.03, 0.12]	
Hwang 2004		0.00529594	1372	55	2.0%	0.04 [0.03, 0.05]	-
Khaitan 2003		0.08365468	19	3	0.6%	0.16 [-0.01, 0.32]	
Lee 2012	0.06986028	0.00805296	1002	70	1.9%	0.07 [0.05, 0.09]	-
Leung 2009	0.02813731	0.00392283	1777	50	2.0%	0.03 [0.02, 0.04]	-
Lumley 2002	0.03896104	0.01559285	154	6	1.8%	0.04 [0.01, 0.07]	-
MacLean 2002	0.25138632	0.01318822	1082	272	1.9%	0.25 [0.23, 0.28]	_
Mendez-Gallart 2011		0.09486833	10	1	0.5%	0.10 [-0.09, 0.29]	
Miyashiro 2010		0.00389022	847	11	2.0%	0.01 [0.01, 0.02]	ľ
Muffly 2012		0.00123834	3321	17	2.0%	0.01 [0.00, 0.01]	
Murphy 2006		0.06289174	46	11	0.9%	0.24 [0.12, 0.36]	
Nelson 2006		0.00627504	784 148	25 18	2.0% 1.7%	0.03 [0.02, 0.04] 0.11 [0.06, 0.16]	<u> </u>
Ng 2009 Parakh 2007		0.02552433 0.01121764	290	16 11	1.7%	0.04 [0.02, 0.06]	-
Parikh 2008		0.00137019	46798	4555	2.0%	0.10 [0.09, 0.10]	
Rogula 2007		0.00181574	3463	40	2.0%	0.01 [0.01, 0.02]	<u> </u>
Rosin 2007		0.01152984	306	13	1.9%	0.04 [0.02, 0.07]	-
Saklani 2012		0.01278533	331	19	1.9%	0.06 [0.03, 0.08]	-
Salum 2001	0.05251142	0.01065803	438	23	1.9%	0.05 [0.03, 0.07]	-
Scholin 2011	0.05216285	0.00793115	786	41	1.9%	0.05 [0.04, 0.07]	-
Sileri 2008	0.19202899	0.02370974	276	53	1.7%	0.19 [0.15, 0.24]	-
Sowande 2011		0.05004381	33	3	1.1%	0.09 [-0.01, 0.19]	
Tashjian 2007	0.13636364	0.073165	22	3	0.8%	0.14 [-0.01, 0.28]	
Taylor 2006		0.00800084	444	13	1.9%	0.03 [0.01, 0.04]	Ľ
Taylor 2010		0.00796093	411	11	1.9%	0.03 [0.01, 0.04]	[T
Tsao 2007		0.00255038	1105	8 26	2.0%	0.01 [0.00, 0.01]	[<u></u>
van Eijck 2008 Varkarakie 2007		0.03147048	147 434	26 46	1.5% 1.9%	0.18 [0.12, 0.24]	
Varkarakis 2007 Subtotal (95% CI)	0.10599078	0.01477611	434 74904	46 5995	73.9%	0.11 [0.08, 0.13] 0.07 [0.06, 0.09]	• ·
Heterogeneity: Tau ² = 0.	00: Chi²= 3926	6.10. df= 43 (P				[0.00, 0.00]	'
Test for overall effect: Z=			0.00001/,1 =	55 %			
	, 5.00	,					
Total (95% CI)			97693	10256	100.0%	0.09 [0.07, 0.10]	♦
Heterogeneity: Tau² = 0.	•		< 0.00001); l² =	99%			-0.5 -0.25 0 0.25 0.5
Test for overall effect: Z=	•						-0.5 -0.25 0 0.25 0.5 Incidence
Test for subgroup differe	ences: Chi ^z = 3	.78, at = 1 (P =	u.u5), l*= 73.5%	•			

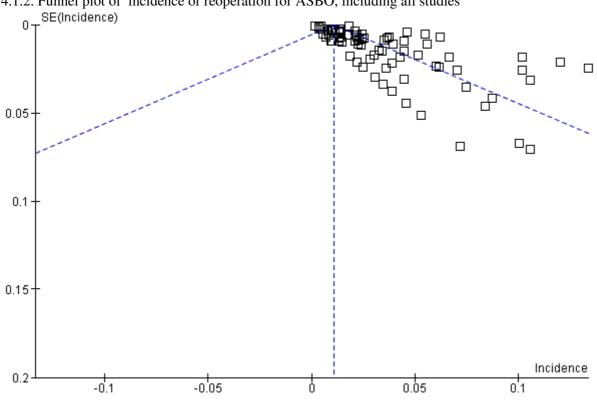
3.8.2. Table of sensitivity analysis of the incidence of PSBO, impact of publication date

Study	Point estimate	95% CI
All studies included	0.09	0.07-0.10
Studie published before the year 2000	0.12	0.07-0.17
Studies published in the year 2000 and later	0.07	0.06-0.09

4.1.1. Forest plot of the incidence of reoperation for ASBO, including all studies Incidence Incidence

r		•		ASBO		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total		IV, Random, 95% CI	IV, Random, 95% CI
Abasbassi 2011 Aberg 2007		0.00567679 0.02476436	652 188	14 25	1.9% 0.4%	0.0215 [0.0103, 0.0326] 0.1330 [0.0844, 0.1815]	-
Abol-Enein 2001		0.00591705	238	25	1.9%	0.0084 [-0.0032, 0.0200]	
Adachi 1995		0.09931135	23	8	0.0%	0.3478 [0.1532, 0.5425]	
Ahlberg 1997	0.01386963	0.00435544	721	10	2.1%	0.0139 [0.0053, 0.0224]	-
Alexakis 2003		0.05122782	19	1	0.1%	0.0526 [-0.0478, 0.1530]	
Amos 1996		0.02177456	78	3	0.5%	0.0385 [-0.0042, 0.0811]	
Arnold 2010		0.02374868	100	6 7	0.4%	0.0600 [0.0135, 0.1065]	 -
Atiq 1993 Bissada 2004	0.03448276	0.06761234	35 29	1	0.1% 0.2%	0.2000 [0.0675, 0.3325] 0.0345 [-0.0319, 0.1009]	
Blachar 2002		0.00605591	463	8	1.9%	0.0173 [0.0054, 0.0291]	
Cabot 2010		0.00375932	530	4	2.2%	0.0075 [0.0002, 0.0149]	-
Capella 2006	0.03730273	0.00717792	697	26	1.7%	0.0373 [0.0232, 0.0514]	
Catena 2012		0.01092695	181	4	1.2%	0.0221 [0.0007, 0.0435]	
Champion 2003	0.00335008	0.0023649	597	2	2.3%	0.0034 [-0.0013, 0.0080]	Ţ,
Chang 2012	0.1		20	2	0.1%	0.1000 [-0.0315, 0.2315]	
Chin 2007 Cho 2006		0.00516791 0.00159434	193 1400	1 5	2.0% 2.4%	0.0052 [-0.0049, 0.0153] 0.0036 [0.0004, 0.0067]	Ĺ
Choudhry 2006		0.01125775	414	23	1.2%	0.0556 [0.0335, 0.0776]	
Coran 1990	0.07	0.0255147	100	7	0.4%	0.0700 [0.0200, 0.1200]	
Dadan 1996	0.02439024	0.02409097	41	1	0.4%	0.0244 [-0.0228, 0.0716]	
Dasmahapatra 1991		0.03072065	45	2	0.3%	0.0444 [-0.0158, 0.1047]	+
Edna 1998	0.04449153		472	21	1.4%	0.0445 [0.0259, 0.0631]	
El-Gohary 2010	0.04237288		118	5	0.6%	0.0424 [0.0060, 0.0787]	
Els 1993		0.01527743	181	8	0.8%	0.0442 [0.0143, 0.0741]	
Escobar 2004 Eshuis 2010		0.01169343 0.01801577	169 55	4	1.2% 0.7%	0.0237 [0.0007, 0.0466] 0.0182 [-0.0171, 0.0535]	
Fan 2001		0.06883029	14	1	0.1%	0.0714 [-0.0635, 0.2063]	
Fazio 2006		0.00344203	1701	35	2.2%	0.0206 [0.0138, 0.0273]	-
Gunabushanam 2009		0.00394576	835	11	2.1%	0.0132 [0.0054, 0.0209]	
Guru 2010		0.03771464	26	1	0.2%	0.0385 [-0.0355, 0.1124]	
Ha 2008	0.10526316	0.0704059	19	2	0.1%	0.1053 [-0.0327, 0.2433]	 • • • • • • • • • • • • • • • • • •
Hayashi 2008		0.00692029	144	1	1.7%	0.0069 [-0.0066, 0.0205]	+
Hernandez-Richter 1999		0.00238081	726	3	2.3%	0.0041 [-0.0005, 0.0088]	<u> </u>
Hwang 2004		0.00271321	1372	14	2.3%	0.0102 [0.0049, 0.0155]	_
Jeong 2008		0.00412017	2586	119	2.1%	0.0460 [0.0379, 0.0541]	
Kawamura 2009 Kehoe 2009		0.01839535 0.01106099	182 307	12 12	0.6% 1.2%	0.0659 [0.0299, 0.1020] 0.0391 [0.0174, 0.0608]	
Lee 2012		0.00329179	1002	11	2.2%	0.0110 [0.0045, 0.0174]	-
Leung 2009		0.00250247	1777	20	2.3%	0.0113 [0.0064, 0.0162]	-
Lin 1995		0.03563891	54	4	0.2%	0.0741 [0.0042, 0.1439]	
Lumley 2002	0.03246753	0.01428226	154	5	0.9%	0.0325 [0.0045, 0.0605]	
MacLean 2002		0.00732706	1082	67	1.7%	0.0619 [0.0476, 0.0763]	
Mais 1998		0.03148648	95	10	0.3%	0.1053 [0.0436, 0.1670]	
Majewski 2005		0.01755047	157	8	0.7%	0.0510 [0.0166, 0.0854]	
Menzies 1990 Miyashiro 2010		0.00264728 0.00332354	1913 847	26 8	2.3% 2.2%	0.0136 [0.0084, 0.0188] 0.0094 [0.0029, 0.0160]	
Montz 1994		0.02421756	98	6	0.4%	0.0612 [0.0138, 0.1087]	
Muffly 2012	0.00150557	0.0006728	3321	5	2.4%	0.0015 [0.0002, 0.0028]	
Murphy 2006		0.04154492	46	4	0.2%	0.0870 [0.0055, 0.1684]	
Nelson 2006	0.00892857	0.00335958	784	7	2.2%	0.0089 [0.0023, 0.0155]	-
Ng 2009		0.01485116	148	5	0.9%	0.0338 [0.0047, 0.0629]	
Nieuwenhuijzen 1998		0.02121724	234	28	0.5%	0.1197 [0.0781, 0.1612]	
Nour 1996		0.02570137	138	14	0.4%	0.1014 [0.0511, 0.1518]	
Pace 2002 Parakh 2007		0.10006825 0.00684882	13 290	2 4	1.8%	0.1538 [-0.0423, 0.3500] 0.0138 [0.0004, 0.0272]	
Parakh 2007 Parikh 2008		0.00084882		845	2.4%	0.0138 [0.0004, 0.0272]	
Ragni 1996		0.02150154	46736	1	0.5%	0.0217 [-0.0204, 0.0639]	+
Rempen 1995		0.00956905	104	1	1.4%	0.0096 [-0.0091, 0.0284]	+-
Ritchey 1993		0.00519189	1910	104	2.0%	0.0545 [0.0443, 0.0646]	-
Rogula 2007		0.00111596	3463	15	2.4%	0.0043 [0.0021, 0.0065]	-
Rosen 2009		0.00913213	109	1	1.4%	0.0092 [-0.0087, 0.0271]	<u>†</u>
Rosin 2007		0.00854678	306 500	7	1.5%	0.0229 [0.0061, 0.0396]	
Ryan 2004 Sai 2007		0.00771747 0.04606423	583 36	21 3	1.6% 0.1%	0.0360 [0.0209, 0.0511] 0.0833 [-0.0070, 0.1736]	<u> </u>
Saklani 2012	0.00333333	0.04606423	331	8	1.5%	0.0242 [0.0076, 0.0407]	
Salum 2001		0.00747651	438	11	1.7%	0.0242 [0.0070, 0.0407]	—
Scholin 2011		0.00547824	786	19	1.9%	0.0242 [0.0134, 0.0349]	
Sileri 2008		0.01817361	276	28	0.7%	0.1014 [0.0658, 0.1371]	
Sowande 2011		0.02984036	33	1	0.3%	0.0303 [-0.0282, 0.0888]	
Stanton 2010		0.00741731	232	3	1.7%	0.0129 [-0.0016, 0.0275]	<u> </u>
Talwar 1997		0.02479875	56	2	0.4%	0.0357 [-0.0129, 0.0843]	
Tashjian 2007		0.04440947	22	1	0.1%	0.0455 [-0.0416, 0.1325]	
Taylor 2006 Taylor 2010		0.00500775 0.00721891	444 411	5 9	2.0% 1.7%	0.0113 [0.0014, 0.0211] 0.0219 [0.0077, 0.0360]	
Tsao 2007		0.00721691	1105	7	2.3%	0.0063 [0.0017, 0.0110]	-
van Eijck 2008		0.02996393	147	23	0.3%	0.1565 [0.0977, 0.2152]	→
Varkarakis 2007		0.00876835	434	15	1.5%	0.0346 [0.0174, 0.0517]	—
Wakhlu 2000		0.01963595	71	2	0.6%	0.0282 [-0.0103, 0.0667]	+
Wakhlu 2009		0.01017339	138	2	1.3%	0.0145 [-0.0054, 0.0344]	+
Wang 1999		0.01705872	100	3	0.7%	0.0300 [-0.0034, 0.0634]	
Wang 2005		0.00924262	152	2	1.4%	0.0132 [-0.0050, 0.0313]	
Yamataka 1997	0.02083333	0.00921939	240	5	1.4%	0.0208 [0.0028, 0.0389]	
Total (95% CI)			86595	1700	100.0%	0.0237 [0.0203, 0.0271]	▲
Heterogeneity: Tau ² = 0.00	: Chi² = Q07 72	df = 82 /P < 0				5.0257 [0.0203, 0.027 1]	
Test for overall effect: $Z = 1$				017			-0.1 -0.05 0 0.05 0.1
	(,					Incidence

4.1.2. Funnel plot of incidence of reoperation for ASBO, including all studies



4.2.1. Forest plot of analysis for the incidence of reoperation for ASBO in studies with adequate description of follow-up for best and worst case scenario analysis.

63 included, 37 studies without loss to follow-up (at least one long term follow-up moment in each patient)

tudy or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
perg 2007	0.13297872	0.02476436	188	25	0.7%	0.1330 [0.0844, 0.1815]	
bol-Enein 2001	0.00840336	0.00591705	238	2	2.7%	0.0084 [-0.0032, 0.0200]	 -
dachi 1995	0.34782609	0.09931135	23	8	0.1%	0.3478 [0.1532, 0.5425]	_
hlberg 1997	0.01386963	0.00435544	721	10	2.9%	0.0139 [0.0053, 0.0224]	_
lexakis 2003	0.05263158	0.05122782	19	1		0.0526 [-0.0478, 0.1530]	
mos 1996	0.03846154		78	3		0.0385 [-0.0042, 0.0811]	
rnold 2010		0.02374868	100	6	0.8%	0.0600 [0.0135, 0.1065]	
tiq 1993		0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	
issada 2004	0.03448276		29	1		0.0345 [-0.0319, 0.1009]	
abot 2010	0.00754717		530	4	2.9%	0.0075 [0.0002, 0.0149]	_
apella 2006	0.03730273		697	26	2.5%	0.0373 [0.0232, 0.0514]	
atena 2012	0.02209945		181 597	4	1.9%	0.0221 [0.0007, 0.0435] 0.0034 [-0.0013, 0.0080]	L ⁻
champion 2003 Chang 2012	0.00335008	0.0023649 0.06708204	20	2		0.1000 [-0.0315, 0.2315]	
chin 2007	0.00518135		193	1		0.0052 [-0.0049, 0.0153]	_
houdhry 2006	0.05555556		414	23	1.9%	0.0556 [0.0335, 0.0776]	
oran 1990	0.07	0.0255147	100	7	0.7%	0.0700 [0.0200, 0.1200]	
adan 1996	0.02439024		41	1		0.0244 [-0.0228, 0.0716]	+-
asmahapatra 1991	0.04444444		45	2		0.0444 [-0.0158, 0.1047]	+
dna 1998	0.04449153		472	21	2.1%	0.0445 [0.0259, 0.0631]	—
I-Gohary 2010	0.04237288		118	5	1.1%	0.0424 [0.0060, 0.0787]	
is 1993		0.01527743	181	8	1.4%	0.0442 [0.0143, 0.0741]	
scobar 2004	0.02366864		169	4	1.8%	0.0237 [0.0007, 0.0466]	
shuis 2010	0.01818182	0.01801577	55	1	1.1%	0.0182 [-0.0171, 0.0535]	+-
an 2001	0.07142857	0.06883029	14	1		0.0714 [-0.0635, 0.2063]	
azio 2006	0.02057613	0.00344203	1701	35	3.0%	0.0206 [0.0138, 0.0273]	-
uru 2010	0.03846154	0.03771464	26	1		0.0385 [-0.0355, 0.1124]	
la 2008	0.10526316	0.0704059	19	2		0.1053 [-0.0327, 0.2433]	-
layashi 2008	0.00694444	0.00692029	144	1		0.0069 [-0.0066, 0.0205]	+
lernandez-Richter 1999	0.00413223		726	3		0.0041 [-0.0005, 0.0088]	<u>-</u>
lwang 2004	0.01020408		1372	14	3.1%	0.0102 [0.0049, 0.0155]	_
eong 2008	0.04601701		2586	119	2.9%	0.0460 [0.0379, 0.0541]	
(awamura 2010	0.06593407		182	12	1.1%	0.0659 [0.0299, 0.1020]	
eung 2009	0.01125492		1777	20	3.1%	0.0113 [0.0064, 0.0162]	_
in 1995	0.07407407		54	4	0.4%	0.0741 [0.0042, 0.1439]	
umley 2002	0.03246753		154	5	1.5% 2.4%	0.0325 [0.0045, 0.0605] 0.0619 [0.0476, 0.0763]	_
1acLean 2002 1ais 1998	0.06192237 0.10526316		1082 95	67 10	0.5%	0.1053 [0.0476, 0.0763]	
lajewski 2005	0.05095541		157	8	1.2%	0.0510 [0.0166, 0.0854]	
lenzies 1990	0.03093341		1913	26	3.1%	0.0136 [0.0084, 0.0188]	_
1uffly 2012	0.00150557	0.00204728	3321	5	3.2%	0.0015 [0.0002, 0.0028]	
turphy 2006	0.08695652		46	4	0.3%	0.0870 [0.0055, 0.1684]	
lelson 2006	0.00892857		784	7	3.0%	0.0089 [0.0023, 0.0155]	-
lg 2009	0.03378378		148	5	1.4%	0.0338 [0.0047, 0.0629]	
lieuwenhuijzen 1998	0.11965812		234	28	0.9%	0.1197 [0.0781, 0.1612]	
lour 1996	0.10144928		138	14	0.7%	0.1014 [0.0511, 0.1518]	
ace 2002	0.15384615		13	2		0.1538 [-0.0423, 0.3500]	
Ragni 1996	0.02173913	0.02150154	46	1		0.0217 [-0.0204, 0.0639]	
rosen 2009	0.00917431	0.00913213	109	1		0.0092 [-0.0087, 0.0271]	+
Rosin 2007	0.02287582	0.00854678	306	7	2.3%	0.0229 [0.0061, 0.0396]	
aklani 2012	0.02416918	0.0084412	331	8	2.3%	0.0242 [0.0076, 0.0407]	
cholin 2011	0.02417303	0.00547824	786	19	2.7%	0.0242 [0.0134, 0.0349]	-
ileri 2008	0.10144928		276	28	1.1%	0.1014 [0.0658, 0.1371]	
owande 2011	0.03030303	0.02984036	33	1		0.0303 [-0.0282, 0.0888]	
tanton 2010	0.01293103	0.00741731	232	3		0.0129 [-0.0016, 0.0275]	 -
ashjian 2007	0.04545455		22	1		0.0455 [-0.0416, 0.1325]	
aylor 2010	0.02189781		411	9	2.5%	0.0219 [0.0077, 0.0360]	_
sao 2007	0.00633484		1105	. 7	3.1%	0.0063 [0.0017, 0.0110]	<u> </u>
arkarakis 2007	0.03456221		434	15	2.2%	0.0346 [0.0174, 0.0517]	
Vakhlu 2000	0.02816901		71	2		0.0282 [-0.0103, 0.0667]	
Vakhlu 2009	0.01449275		138	2		0.0145 [-0.0054, 0.0344]	<u> </u>
Vang 1999		0.01705872	100	3		0.0300 [-0.0034, 0.0634]	
Vang 2005	0.01315789	0.00924262	152	2	2.2%	0.0132 [-0.0050, 0.0313]	<u> </u>
otal (95% CI)			26482	676	100.0%	U U360 IU U333 U U34E1	🛦
			20402	0/0	100.070	0.0269 [0.0222, 0.0315]	7
eterogeneity: Tau² = 0.00	Ohiz - 500 40	$df = 0.0 \times 0.0 \times 0$	0000045	12 - 0.00	V.		-0.2 -0.1 0 0.1

4.2.2. Forest plot of best case analysis for the incidence of reoperation for ASBO

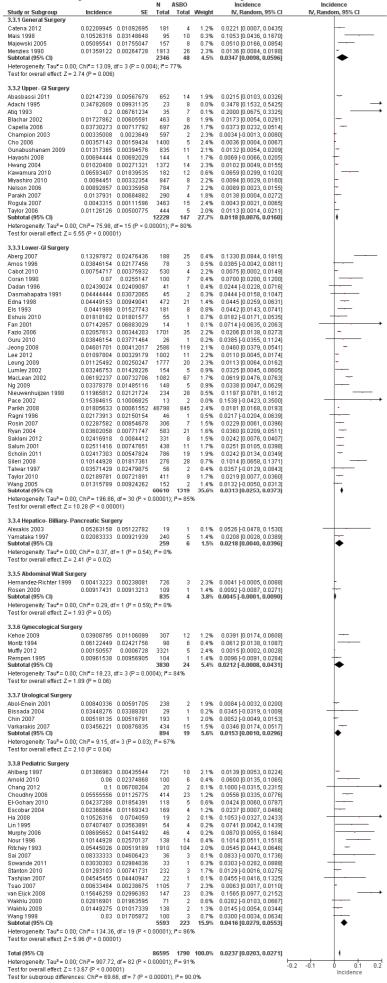
N ASBO
Incidence

, , , , , , , , , , , , , , , , , , ,	st tust unur		N	ASBO		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Aberg 2007		0.02476436	188	25	0.6%	0.1330 [0.0844, 0.1815]	
Abol-Enein 2001		0.00409912	344	2		0.0058 [-0.0022, 0.0138]	<u> </u>
Adachi 1995		0.09931135	23	8	0.0%	0.3478 [0.1532, 0.5425]	
Ahlberg 1997		0.00397247	791	10	3.0%	0.0126 [0.0049, 0.0204]	_
Alexakis 2003		0.05122782	19	1		0.0526 [-0.0478, 0.1530]	
Amos 1996		0.02177456	78	3		0.0385 [-0.0042, 0.0811]	
Arnold 2010		0.02005831	119	6	0.8%	0.0504 [0.0111, 0.0897]	
Atiq 1993		0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	
Bissada 2004		0.03388301 0.00362312	29 550	1		0.0345 [-0.0319, 0.1009]	L
Cabot 2010 Capella 2006		0.00362312	550 697	4 26	3.0% 2.4%	0.0073 [0.0002, 0.0144] 0.0373 [0.0232, 0.0514]	_
Catena 2012		0.00717792	181	4	1.7%	0.0221 [0.0007, 0.0435]	
Champion 2003		0.00198625	711	2		0.0028 [-0.0011, 0.0067]	
Chang 2012		0.06708204	20	2		0.1000 [-0.0315, 0.2315]	
Chin 2007	0.002	0.001998	500	1		0.0020 [-0.0019, 0.0059]	↓
Choudhry 2006		0.01125775	414	23	1.7%	0.0556 [0.0335, 0.0776]	
Coran 1990	0.07	0.0255147	100	7	0.5%	0.0700 [0.0200, 0.1200]	
Dadan 1996		0.02409097	41	1		0.0244 [-0.0228, 0.0716]	
Dasmahapatra 1991		0.03072065	45	2		0.0444 [-0.0158, 0.1047]	+
Edna 1998		0.00949041	472	21	2.0%	0.0445 [0.0259, 0.0631]	-
El-Gohary 2010		0.01367126	161	5	1.4%		
Els 1993		0.01527743	181	8	1.2%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343	169	4	1.6%	0.0237 [0.0007, 0.0466]	
Eshuis 2010		0.01652719	60	1		0.0167 [-0.0157, 0.0491]	
Fan 2001		0.06883029	14	1		0.0714 [-0.0635, 0.2063]	
Fazio 2006		0.00327079	1791	35	3.1%	0.0195 [0.0131, 0.0260]	_
Guru 2010		0.00327078	26	1		0.0385 [-0.0355, 0.1124]	
Ha 2008	0.10526316	0.07704059	19	2		0.1053 [-0.0327, 0.2433]	
Hayashi 2008		0.00664441	150	1		0.0067 [-0.0064, 0.0197]	<u> </u>
Hernandez-Richter 1999	0.00330033	0.00004441	909	3		0.0033 [-0.0004, 0.0070]	
Hwang 2004	0.003366337	0.0013023	1715	14	3.2%	0.0082 [0.0039, 0.0124]	
Jeong 2008	0.00010327		2835	119	3.0%	0.0420 [0.0346, 0.0494]	_
Kawamura 2010		0.00370025	182	12	0.9%	0.0659 [0.0299, 0.1020]	
Leung 2009		0.00190948	2332	20	3.3%	0.0086 [0.0048, 0.0123]	•
Lin 1995		0.03563891	54	4	0.3%	0.0741 [0.0042, 0.1439]	
Lumley 2002		0.01419166	155	5	1.3%	0.0323 [0.0044, 0.0601]	
MacLean 2002		0.00674802	1178	67	2.5%	0.0569 [0.0437, 0.0701]	_
Mais 1998		0.03148648	95	10	0.4%	0.1053 [0.0436, 0.1670]	
Majewski 2005		0.00900546	310	8	2.0%	0.0258 [0.0082, 0.0435]	<u> </u>
Menzies 1990		0.00201534	2517	26	3.2%	0.0103 [0.0064, 0.0143]	
Muffly 2012		0.00067179	3326	5	3.3%	0.0015 [0.0002, 0.0028]	
Murphy 2006		0.03383418	57	4	0.3%	0.0702 [0.0039, 0.1365]	
Nelson 2006		0.00335958	784	7	3.1%	0.0089 [0.0023, 0.0155]	-
Ng 2009		0.01485116	148	5	1.2%	0.0338 [0.0047, 0.0629]	
Nieuwenhuijzen 1998		0.02121724	234	28	0.7%	0.1197 [0.0781, 0.1612]	
Nour 1996		0.02570137	138	14	0.5%	0.1014 [0.0511, 0.1518]	
Pace 2002		0.10006825	13	2		0.1538 [-0.0423, 0.3500]	
Ragni 1996		0.02150154	46	1		0.0217 [-0.0204, 0.0639]	
Rosen 2009		0.00913213	109	1		0.0092 [-0.0087, 0.0271]	 -
Rosin 2007		0.00854678	306	7	2.1%	0.0229 [0.0061, 0.0396]	
Saklani 2012		0.00779035	359	8	2.3%	0.0223 [0.0070, 0.0376]	-
Scholin 2011	0.01968912	0.0044723	965	19	2.9%	0.0197 [0.0109, 0.0285]	-
Sileri 2008		0.01817361	276	28	0.9%	0.1014 [0.0658, 0.1371]	
Sowande 2011		0.02984036	33	1		0.0303 [-0.0282, 0.0888]	
Stanton 2010		0.02364030	232	3		0.0129 [-0.0016, 0.0275]	⊢
Tashjian 2007		0.04440947	22	1		0.0455 [-0.0416, 0.1325]	
Taylor 2010		0.00625567	475	9	2.6%	0.0189 [0.0067, 0.0312]	
Tsao 2007		0.000233675	1105	7	3.2%	0.0063 [0.0017, 0.0110]	
Varkarakis 2007		0.00230073	448	15	2.1%	0.0335 [0.0168, 0.0501]	
Wakhlu 2000		0.00343303	104	2		0.0192 [-0.0072, 0.0456]	
Wakhlu 2009		0.01017339	138	2		0.0145 [-0.0054, 0.0344]	
Wang 1999		0.01705872	100	3		0.0300 [-0.0034, 0.0634]	
Wang 2005		0.00728947	193	2		0.0104 [-0.0039, 0.0246]	↓
++ung 2000	0.01030209	5.55120347	193	2	2.470	0.0104 [0.0000, 0.0240]	
Total (95% CI)			29821	676	100.0%	0.0235 [0.0194, 0.0275]	1.
Heterogeneity: Tau ² = 0.00	· Chi² = 519 21	df = 62 (P < 0					
Test for overall effect: Z = 1			,	, - 00			-0.2 -0.1 0 0.1 0.2
3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.		,					Incidence

4.2.3. Forest plot of worst case analysis for the incidence of reoperation for ASBO

tudy or Subgroup	Incidence	SE	N Total	ASBO Total	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
berg 2007		0.02476436	188	25	1.6%	0.1330 [0.0844, 0.1815]	
bol-Enein 2001	0.31395349		344	108	1.6%	0.3140 [0.2649, 0.3630]	
dachi 1995	0.34782609		23	8	0.6%	0.3478 [0.1532, 0.5425]	
hlberg 1997	0.1011378	0.0107205	791	80	1.8%	0.1011 [0.0801, 0.1221]	
lexakis 2003		0.05122782	19	1		0.0526 [-0.0478, 0.1530]	
mos 1996	0.03846154		78	3		0.0385 [-0.0042, 0.0811]	
rnold 2010	0.21008403		119	25	1.4%	0.2101 [0.1369, 0.2833]	
tiq 1993		0.06761234	35	7	1.0%	0.2000 [0.0675, 0.3325]	
•							
Rissada 2004	0.03448276		29 550	1		0.0345 [-0.0319, 0.1009]	
abot 2010	0.04363636		550	24	1.8%	0.0436 [0.0266, 0.0607]	
apella 2006	0.03730273		697	26	1.8%	0.0373 [0.0232, 0.0514]	-
atena 2012	0.02209945		181	4	1.8%	0.0221 [0.0007, 0.0435]	_
hampion 2003	0.16315049		711	116	1.8%	0.1632 [0.1360, 0.1903]	_
hang 2012		0.06708204	20	2	1.0%		1
hin 2007	0.616	0.02175059	500	308	1.7%	0.6160 [0.5734, 0.6586]	
houdhry 2006	0.0555556	0.01125775	414	23	1.8%	0.0556 [0.0335, 0.0776]	_
oran 1990	0.07	0.0255147	100	7	1.6%	0.0700 [0.0200, 0.1200]	
adan 1996)	0.02439024	0.02409097	41	1	1.6%	0.0244 [-0.0228, 0.0716]	+
asmahapatra 1991	0.04444444	0.03072065	45	2		0.0444 [-0.0158, 0.1047]	
dna 1998	0.04449153		472	21	1.8%	0.0445 [0.0259, 0.0631]	-
I-Gohary 2010		0.03605131	161	48	1.5%	0.2981 [0.2275, 0.3688]	
is 1993		0.01527743	181	8	1.7%	0.0442 [0.0143, 0.0741]	
scobar 2004		0.01327743	169	4	1.8%	0.0237 [0.0007, 0.0466]	
shuis 2010		0.03872983	60	6	1.4%	0.1000 [0.0241, 0.1759]	
an 2001	0.07142857		14	1		0.0714 [-0.0635, 0.2063]	
azio 2006	0.06979341		1791	125	1.8%	0.0698 [0.0580, 0.0816]	_
uru 2010	0.03846154		26	1		0.0385 [-0.0355, 0.1124]	
la 2008	0.10526316	0.0704059	19	2		0.1053 [-0.0327, 0.2433]	
layashi 2008	0.04666667	0.01722186	150	7	1.7%	0.0467 [0.0129, 0.0804]	
lernandez-Richter 1999	0.20462046	0.01338073	909	186	1.8%	0.2046 [0.1784, 0.2308]	_
łwang 2004	0.20816327	0.00980365	1715	357	1.8%	0.2082 [0.1889, 0.2274]	_
eong 2008	0.129806	0.00631217	2835	368	1.8%	0.1298 [0.1174, 0.1422]	_
(awamura 2010	0.06593407	0.01839535	182	12	1.7%	0.0659 [0.0299, 0.1020]	
eung 2009	0.24656947		2332	575	1.8%	0.2466 [0.2291, 0.2641]	
in 1995	0.07407407		54	4	1.5%	0.0741 [0.0042, 0.1439]	
umley 2002	0.03870968		155	6	1.7%	0.0387 [0.0083, 0.0691]	
facLean 2002	0.13837012		1178	163	1.8%	0.1384 [0.1187, 0.1581]	
	0.13637012						
1ais 1998			95	10	1.5%	0.1053 [0.0436, 0.1670]	
1ajewski 2005	0.51935484		310	161	1.6%	0.5194 [0.4637, 0.5750]	
1enzies 1990	0.25029797		2517	630	1.8%	0.2503 [0.2334, 0.2672]	
fuffly 2012		0.00094934	3326	10	1.8%		ľ
1urphy 2006	0.26315789		57	15		0.2632 [0.1488, 0.3775]	
lelson 2006	0.00892857	0.00335958	784	7	1.8%	0.0089 [0.0023, 0.0155]	-
lg 2009	0.03378378	0.01485116	148	5	1.8%	0.0338 [0.0047, 0.0629]	
lieuwenhuijzen 1998	0.11965812	0.02121724	234	28	1.7%	0.1197 [0.0781, 0.1612]	
lour 1996	0.10144928	0.02570137	138	14	1.6%	0.1014 [0.0511, 0.1518]	
ace 2002	0.15384615	0.10006825	13	2		0.1538 [-0.0423, 0.3500]	
Ragni 1996		0.02150154	46	1		0.0217 [-0.0204, 0.0639]	+
Rosen 2009		0.00913213	109	1		0.0092 [-0.0087, 0.0271]	 -
Rosin 2007		0.00854678	306	7	1.8%	0.0229 [0.0061, 0.0396]	_
Saklani 2012	0.10027855		359	36	1.7%	0.1003 [0.0692, 0.1313]	
Scholin 2011	0.20518135		965	198	1.8%	0.2052 [0.1797, 0.2307]	
Sileri 2008	0.10144928		276	28	1.7%	0.1014 [0.0658, 0.1371]	
Sowande 2011		0.02984036	33	1		0.0303 [-0.0282, 0.0888]	
Stanton 2010		0.00741731	232	3		0.0129 [-0.0016, 0.0275]	Γ
ashjian 2007	0.04545455	0.04440947	22	1		0.0455 [-0.0416, 0.1325]	
aylor 2010	0.15368421	0.01654756	475	73	1.7%	0.1537 [0.1213, 0.1861]	
sao 2007	0.00633484	0.00238675	1105	7	1.8%	0.0063 [0.0017, 0.0110]	ŀ
arkarakis 2007	0.06473214	0.01162489	448	29	1.8%	0.0647 [0.0419, 0.0875]	—
Vakhlu 2000		0.04633494	104	35	1.3%	0.3365 [0.2457, 0.4274]	
Vakhlu 2009		0.01017339	138	2		0.0145 [-0.0054, 0.0344]	
Vang 1999		0.01705872	100	3		0.0300 [-0.0034, 0.0634]	<u> </u>
vang 1999 Vang 2005							
vacua zumid	0.22279793	0.02883325	193	43	1.6%	0.2228 [0.1641, 0.2815]	
_			20024	4045	100.0%	0.4432 [0.0043_0.43241	_
otal (95% CI) leterogeneity: Tau² = 0.01	. Alem . Accom	4				0.1132 [0.0943, 0.1321]	

4.3.1. Forest plot of the incidence of reoperation for ASBO, stratified by anatomical location



4.4.1. Forest plot of the incidence of reoperation for ASBO, stratified by surgical technique 14 studies excluded. Surgical technique not specified in 9 studies, 5 studies both techniques without data per subgroup

	υ		N	ASBO	1	Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
3.4.1 Laparotomy		0.00470400	400		0.00/	0.4000 10.0044 0.40451	
Aberg 2007		0.02476436	188	25	0.6%	0.1330 [0.0844, 0.1815]	L —
Abol-Enein 2001		0.00591705 0.09931135	238 23	2 8	2.3% 0.0%	0.0084 [-0.0032, 0.0200] 0.3478 [0.1532, 0.5425]	
Adachi 1995 Ahlberg 1997		0.00435544	721	10	2.5%	0.0139 [0.0053, 0.0224]	-
Alexakis 2003		0.05122782	19	1	0.2%	0.0526 [-0.0478, 0.1530]	
Arnold 2010		0.02374868	100	6	0.6%	0.0600 [0.0135, 0.1065]	
Atiq 1993	0.2	0.06761234	35	7	0.1%	0.2000 [0.0675, 0.3325]	
Bissada 2004	0.03448276	0.03388301	29	1	0.3%	0.0345 [-0.0319, 0.1009]	+
Catena 2012		0.01092695	181	4	1.6%	0.0221 [0.0007, 0.0435]	
Chang 2012		0.12649111	10	2	0.0%	0.2000 [-0.0479, 0.4479]	+
Choudhry 2006		0.01125775	414	23	1.6%	0.0556 [0.0335, 0.0776]	<u> </u>
Coran 1990 Dadan 1996	0.07	0.0255147 0.02409097	100 41	7 1	0.6% 0.6%	0.0700 [0.0200, 0.1200] 0.0244 [-0.0228, 0.0716]	1
Dasmahapatra 1991		0.03072065	45	2	0.4%	0.0444 [-0.0158, 0.1047]	
Edna 1998		0.00949041	472	21	1.8%	0.0444 [0.0259, 0.0631]	
El-Gohary 2010		0.01854391	118	5	0.9%	0.0424 [0.0060, 0.0787]	
Els 1993		0.01527743	181	8	1.1%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343	169	4	1.5%	0.0237 [0.0007, 0.0466]	
Eshuis 2010	0.03846154	0.03771464	26	1	0.3%	0.0385 [-0.0355, 0.1124]	+
Fan 2001		0.06883029	14	1	0.1%	0.0714 [-0.0635, 0.2063]	
Fazio 2006		0.00344203	1701	35	2.6%	0.0206 [0.0138, 0.0273]	-
Ha 2008	0.10526316	0.0704059	19	2			
Hayashi 2008		0.00692029	144	1	2.1%	0.0069 [-0.0066, 0.0205]	Ť
Kawamura 2009		0.01839535	182	12	0.9%	0.0659 [0.0299, 0.1020]	
Kehoe 2009		0.01106099	307	12 4	1.6%	0.0391 [0.0174, 0.0608]	
Lin 1995 Mais 1998		0.03563891 0.03148648	54 95	10	0.3% 0.4%	0.0741 [0.0042, 0.1439] 0.1053 [0.0436, 0.1670]	
Majewski 2005		0.02793358	91	7	0.5%	0.0769 [0.0222, 0.1317]	
Montz 1994		0.02421756	98	6	0.6%	0.0612 [0.0138, 0.1087]	
Murphy 2006		0.04154492	46	4	0.2%	0.0870 [0.0055, 0.1684]	
Nelson 2006	0.00873362	0.0043477	458	4	2.5%	0.0087 [0.0002, 0.0173]	-
Ng 2009		0.02917843	74	5	0.5%	0.0676 [0.0104, 0.1248]	
Nieuwenhuijzen 1998	0.11965812	0.02121724	234	28	0.7%	0.1197 [0.0781, 0.1612]	
Nour 1996	0.10144928	0.02570137	138	14	0.6%	0.1014 [0.0511, 0.1518]	
Ragni 1996	0.02173913	0.02150154	46	1	0.7%	0.0217 [-0.0204, 0.0639]	+-
Ritchey 1993		0.00519189	1910	104	2.4%	0.0545 [0.0443, 0.0646]	_
Saklani 2012		0.01179664	187	. 5	1.5%	0.0267 [0.0036, 0.0499]	
Salum 2001		0.00747651	438	11	2.1%	0.0251 [0.0105, 0.0398]	
Scholin 2011		0.00694842	403	8	2.1%	0.0199 [0.0062, 0.0335]	
Sileri 2008 Sowande 2011		0.01817361 0.02984036	276 33	28 1	0.9% 0.4%	0.1014 [0.0658, 0.1371] 0.0303 [-0.0282, 0.0888]	
Stanton 2010		0.02984036	62	3		0.0484 [-0.0050, 0.1018]	
Talwar 1997		0.02479875	56	2		0.0357 [-0.0129, 0.0843]	
Tashjian 2007		0.04440947	22	1			+
Taylor 2006		0.00500775	444	5	2.4%	0.0113 [0.0014, 0.0211]	-
Tsao 2007	0.01257862	0.0051028	477	6	2.4%	0.0126 [0.0026, 0.0226]	-
van Eijck 2008	0.15646259	0.02996393	147	23	0.4%	0.1565 [0.0977, 0.2152]	
Wakhlu 2000	0.02816901		71	2	0.8%		
Wang 1999		0.01705872	100	3	1.0%	0.0300 [-0.0034, 0.0634]	_
Wang 2005 Subtotal (95% CI)	0.01315789	0.00924262	152 11589	2 488	1.8% 51.1 %	0.0132 [-0.0050, 0.0313] 0.0414 [0.0336, 0.0492]	
Heterogeneity: Tau ² = 0.00	· Chiz = 228 54	df = 40 /P = 0				0.0414 [0.0550, 0.0452]	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Test for overall effect: Z = 1			,	,, 1 - 73	.0		
		,					
3.4.2 Laparoscopy							
Abasbassi 2011	0.02147239	0.00567679	652	14	2.3%	0.0215 [0.0103, 0.0326]	-
Blachar 2002	0.01727862	0.00605591	463	8	2.3%	0.0173 [0.0054, 0.0291]	_
Cabot 2010		0.00375932	530	4	2.6%	0.0075 [0.0002, 0.0149]	_
Capella 2006		0.00717792	697	26	2.1%	0.0373 [0.0232, 0.0514]	
Champion 2003	0.00335008	0.0023649	597	2	2.7%	0.0034 [-0.0013, 0.0080]	
Chang 2012	0.00540405	0.00546704	10	0	2.40	Not estimable 0.0052 (-0.0049, 0.0153)	1
Chin 2007 Cho 2006		0.00516791	193 1400	1 5	2.4%	0.0052 [-0.0049, 0.0153]	Ţ
Eshuis 2010		0.00159434 0.03388301	1400	1		0.0036 [0.0004, 0.0067]	
Gunabushanam 2009		0.00394576	835	11	2.5%	0.0132 [0.0054, 0.0209]	-
Guru 2010		0.03771464	26	1		0.0385 [-0.0355, 0.1124]	+
Hernandez-Richter 1999		0.00238081	726	3		0.0041 [-0.0005, 0.0088]	ŀ
Hwang 2004	0.01020408	0.00271321	1372	14	2.7%	0.0102 [0.0049, 0.0155]	-
Jeong 2008	0.04601701	0.00412017	2586	119	2.5%	0.0460 [0.0379, 0.0541]	-
Lumley 2002		0.01428226	154	5	1.2%	0.0325 [0.0045, 0.0605]	
Majewski 2005		0.01550245	64	1		0.0156 [-0.0148, 0.0460]	+
Miyashiro 2010		0.00332354	847	8	2.6%	0.0094 [0.0029, 0.0160]	ľ
Nelson 2006		0.00306278	326	1	∠.6%	0.0031 [-0.0029, 0.0091]	Ţ
Ng 2009 Pace 2002	0 0 15384615	0.10006825	74 13	0 2	0.0%	Not estimable 0.1538 [-0.0423, 0.3500]	
Parakh 2007		0.00684882	290	4	2.2%	0.0138 [0.0004, 0.0272]	F .
Rogula 2007		0.000111596	3463	15	2.7%	0.0043 [0.0004, 0.0272]	,
Rosin 2007		0.00854678	306	7	1.9%	0.0229 [0.0061, 0.0396]	
Sai 2007		0.04606423	36	3		0.0833 [-0.0070, 0.1736]	
Saklani 2012		0.01190218	144	3	1.5%		
Scholin 2011		0.00853433	383	11	1.9%	0.0287 [0.0120, 0.0454]	
Stanton 2010	0	0	170	0		Not estimable	
Tsao 2007	0.00159236	0.00159109	628	1	2.7%	0.0016 [-0.0015, 0.0047]	t.
Subtotal (95% CI)	01.7		17014	270	48.9%	0.0133 [0.0092, 0.0174]	'
Heterogeneity: Tau ² = 0.00			1.00001)	ı; I*= 869	Хо		
Test for overall effect: Z = 6	.33 (F < 0.000l) i)					
Total (95% CI)			28603	758	100.0%	0.0257 [0.0215, 0.0299]	
Heterogeneity: Tau ² = 0.00	; Chi² = 538.51	, df = 74 (P < ∩				,	
Test for overall effect: Z = 1			,	.,	-		-0.2 -0.1 0 0.1 0.2
Test for subgroup different			0.00001), I² = 97.	.5%		Incidence

4.4.2. Forest plot for the incidence of reoperation for ASBO compared between laparoscopy and laparotomy Laparoscopy Laparotomy Odds Ratio Odds Ratio

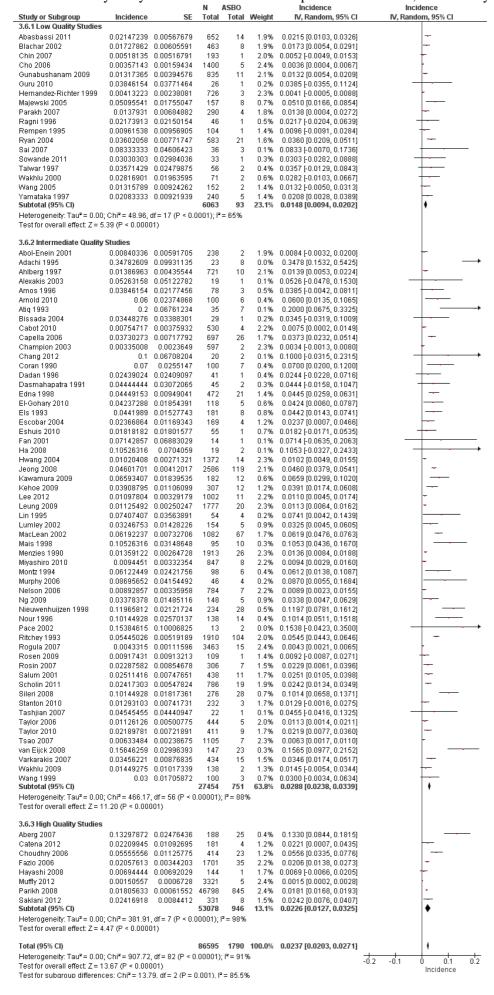
	Laparos	сору	Laparot	omy		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Chang 2012	0	10	2	10	6.0%	0.16 [0.01, 3.85]	
Eshuis 2010	1	29	1	26	7.2%	0.89 [0.05, 15.04]	-
Majewski 2005	1	64	7	91	10.9%	0.19 [0.02, 1.59]	
Nelson 2006	1	326	4	458	10.4%	0.35 [0.04, 3.14]	
Ng 2009	0	74	5	74	6.9%	0.08 [0.00, 1.56]	
Saklani 2012	3	144	5	187	17.0%	0.77 [0.18, 3.30]	
Scholin 2011	11	383	8	403	23.9%	1.46 [0.58, 3.67]	
Stanton 2010	0	170	3	62	6.6%	0.05 [0.00, 0.98]	
Tsao 2007	1	628	6	477	10.9%	0.13 [0.02, 1.04]	-
Total (95% CI)		1828		1788	100.0%	0.38 [0.16, 0.91]	•
Total events	18		41				
Heterogeneity: Tau ² =	= 0.58; Chi ^a	$^2 = 12.69$	9, df = 8 (F	P = 0.12); I ^z = 37%	6	0.01 0.1 1 10 100
Test for overall effect	Z = 2.19 (F	P = 0.03))				0.01 0.1 1 10 100 Favours laparotomy

4.5.1. Sensitivity analysis of the incidence of reoperation for ASBO, impact of individual studies

4.5.1. Sensitivity analysis of the incidence		
Study	Point estimate	95%CI
All available studies	0.02	0.02-0.03
Abasbassi 2011	0.02	0.02-0.03
Aberg 2007	0.02	0.02-0.03
Abol-Enein 2001	0.02	0.02-0.03
Adachi 1995	0.02	0.02-0.03
Ahlberg 1997	0.02	0.02-0.03
Alexakis 2003	0.02	0.02-0.03
Amos 1996	0.02	0.02-0.03
Arnold 2010	0.02	0.02-0.03
Atiq 1993	0.02	0.02-0.03
Bissada 2004	0.02	0.02-0.03
Blachar 2002	0.02	0.02-0.03
Cabot 2010	0.02	0.02-0.03
Capella 2006	0.02	0.02-0.03
Catena 2012	0.02	0.02-0.03
Champion 2003	0.02	0.02-0.03
Chang 2012	0.02	0.02-0.03
Chin 2007	0.02	0.02-0.03
Cho 2006	0.02	0.02-0.03
Choudhry 2006	0.02	0.02-0.03
Coran 1990	0.02	0.02-0.03
Dadan 1996	0.02	0.02-0.03
Dasmahapatra 1991	0.02	0.02-0.03
Edna 1998		
	0.02	0.02-0.03
El-Gohary 2010	0.02	0.02-0.03
Els 1993	0.02	0.02-0.03
Escobar 2004	0.02	0.02-0.03
Eshuis 2010	0.02	0.02-0.03
Fan 2001	0.02	0.02-0.03
Fazio 2006	0.02	0.02-0.03
Gunabushanam 2009	0.02	0.02-0.03
Guru 2010	0.02	0.02-0.03
Ha 2008	0.02	0.02-0.03
Hayashi 2008	0.02	0.02-0.03
Hernandez-Richter 1999	0.02	0.02-0.03
Hwang 2004	0.02	0.02-0.03
Jeong 2008	0.02	0.02-0.03
Kawamura 2009	0.02	0.02-0.03
Kehoe 2009	0.02	0.02-0.03
Lee 2012	0.02	0.02-0.03
Leung 2009	0.02	0.02-0.03
Lin 1995	0.02	0.02-0.03
Lumley 2002	0.02	0.02-0.03
MacLean 2002	0.02	0.02-0.03
Mais 1998	0.02	0.02-0.03
Majewski 2005	0.02	0.02-0.03
Menzies 1990	0.02	0.02-0.03
Miyashiro 2010	0.02	0.02-0.03
Montz 1994	0.02	0.02-0.03
Muffly 2012	0.02	0.02-0.03
Murphy 2006	0.02	0.02-0.03
Nelson 2006	0.02	0.02-0.03
Ng 2009	0.02	0.02-0.03
Nieuwenhuijzen 1998	0.02	0.02-0.03
Nour 1996	0.02	0.02-0.03
Pace 2002	0.02	0.02-0.03
Parakh 2007	0.02	0.02-0.03
Parikh 2008	0.02	0.02-0.03
Ragni 1996	0.02	0.02-0.03
Rempen 1995	0.02	0.02-0.03
1		
Ritchey 1993	0.02	0.02-0.03
Rogula 2007	0.02	0.02-0.03

Rosen 2009	0.02	0.02-0.03
Rosin 2007	0.02	0.02-0.03
Ryan 2004	0.02	0.02-0.03
Sai 2007	0.02	0.02-0.03
Saklani 2012	0.02	0.02-0.03
Salum 2001	0.02	0.02-0.03
Scholin 2011	0.02	0.02-0.03
Sileri 2008	0.02	0.02-0.03
Sowande 2011	0.02	0.02-0.03
Stanton 2010	0.02	0.02-0.03
Talwar 1997	0.02	0.02-0.03
Tashjian 2007	0.02	0.02-0.03
Taylor 2006	0.02	0.02-0.03
Taylor 2010	0.02	0.02-0.03
Tsao 2007	0.02	0.02-0.03
van Eijck 2008	0.02	0.02-0.03
Varkarakis 2007	0.02	0.02-0.03
Wakhlu 2000	0.02	0.02-0.03
Wakhlu 2009	0.02	0.02-0.03
Wang 1999	0.02	0.02-0.03
Wang 2005	0.02	0.02-0.03
Yamataka 1997	0.02	0.02-0.03

4.6.1. Sensitivity analysis of the incidence of reoperation for ASBO, stratified by quality of study



4.6.2. Table of Sensitivity analysis of the incidence of ASBO, impact of quality of studies

Study	Point estimate	95%CI
All available studies	0.0237	0.0203-0.0271
Low Quality studies only	0.0148	0.0094-0.0202
Intermediate Quality studies only	0.0288	0.0238-0.0339
High studies only	0.0226	0.0127-0.0325

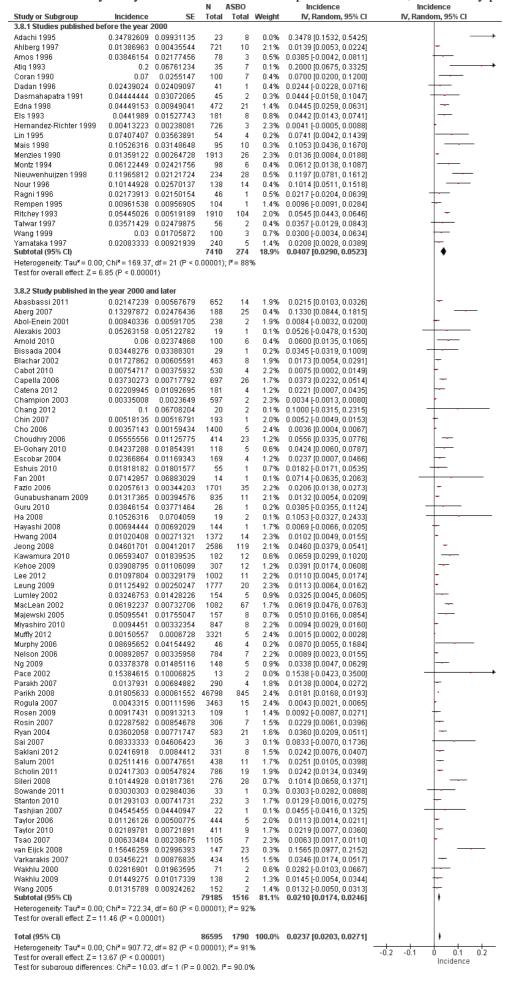
4.7.1. Sensitivity analysis of the incidence of reoperation for ASBO, stratified by study design

Study or Subgroup 3.7.1 Retrospective		65		ASBO	187-1-1-4	Incidence	Incidence
	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Abasbassi 2011	0.02147239	0.00567679	652	14	1.9%	0.0215 [0.0103, 0.0326]	_
Aberg 2007	0.13297872		188	25	0.4%	0.1330 [0.0844, 0.1815]	
Abol-Enein 2001	0.00840336		238	2	1.9%	0.0084 [-0.0032, 0.0200]	-
Adachi 1995	0.34782609	0.09931135	23	8	0.0%	0.3478 [0.1532, 0.5425]	
Ahlberg 1997	0.01386963		721	10	2.1%	0.0139 [0.0053, 0.0224]	_
Amos 1996	0.03846154		78	3		0.0385 [-0.0042, 0.0811]	
Arnold 2010		0.02374868	100	6	0.4%	0.0600 [0.0135, 0.1065]	
Bissada 2004	0.03448276		29	1	0.2%	0.0345 [-0.0319, 0.1009]	
Blachar 2002 Capella 2006	0.01727862 0.03730273		463 697	8 26	1.9% 1.7%	0.0173 [0.0054, 0.0291] 0.0373 [0.0232, 0.0514]	_
Capella 2000 Champion 2003	0.00335008	0.0023649	597	20	2.3%	0.0034 [-0.0013, 0.0080]	-
Chang 2012		0.06708204	20	2	0.1%	0.1000 [-0.0315, 0.2315]	
Cho 2006	0.00357143		1400	5	2.4%	0.0036 [0.0004, 0.0067]	-
Choudhry 2006	0.0555556		414	23	1.2%	0.0556 [0.0335, 0.0776]	
Coran 1990	0.07	0.0255147	100	7	0.4%	0.0700 [0.0200, 0.1200]	
Dadan 1996	0.02439024	0.02409097	41	1	0.4%	0.0244 [-0.0228, 0.0716]	+-
Dasmahapatra 1991	0.04444444	0.03072065	45	2	0.3%	0.0444 [-0.0158, 0.1047]	+
Edna 1998	0.04449153		472	21	1.4%	0.0445 [0.0259, 0.0631]	_
El-Gohary 2010	0.04237288		118	5	0.6%	0.0424 [0.0060, 0.0787]	
Els 1993		0.01527743	181	8	0.8%	0.0442 [0.0143, 0.0741]	
Escobar 2004		0.01169343	169	4	1.2%	0.0237 [0.0007, 0.0466]	_
Fan 2001	0.07142857		14	1		0.0714 [-0.0635, 0.2063]	
Gunabushanam 2009 Guru 2010	0.01317365		835 26	11 1	2.1% 0.2%	0.0132 [0.0054, 0.0209] 0.0385 [-0.0355, 0.1124]	
Ha 2008	0.03846154 0.10526316	0.03771464	19	2	0.2%	0.1053 [-0.0327, 0.2433]	
Hernandez-Richter 1999	0.00413223		726	3	2.3%	0.0041 [-0.0005, 0.0088]	
Hwang 2004	0.01020408		1372	14	2.3%	0.0102 [0.0049, 0.0155]	-
Jeong 2008	0.04601701		2586	119	2.1%	0.0460 [0.0379, 0.0541]	-
Kawamura 2010	0.06593407		182	12	0.6%	0.0659 [0.0299, 0.1020]	
Kehoe 2009	0.03908795		307	12	1.2%	0.0391 [0.0174, 0.0608]	
_eung 2009	0.01125492		1777	20	2.3%	0.0113 [0.0064, 0.0162]	-
_in 1995	0.07407407		54	4	0.2%	0.0741 [0.0042, 0.1439]	
MacLean 2002	0.06192237	0.00732706	1082	67	1.7%	0.0619 [0.0476, 0.0763]	_
Mais 1998	0.10526316		95	10	0.3%	0.1053 [0.0436, 0.1670]	
vlenzies 1990	0.01359122		1913	26	2.3%	0.0136 [0.0084, 0.0188]	_
Miyashiro 2010	0.0094451	0.00332354	847	8	2.2%	0.0094 [0.0029, 0.0160]	_
vlontz 1994	0.06122449		98	6	0.4%	0.0612 [0.0138, 0.1087]	
vluffly 2012	0.00150557	0.0006728	3321	5	2.4%	0.0015 [0.0002, 0.0028]	
Murphy 2006	0.08695652		46	4	0.2%	0.0870 [0.0055, 0.1684]	
Nieuwenhuijzen 1998 Nour 1996	0.11965812 0.10144928		234 138	28 14	0.5% 0.4%	0.1197 [0.0781, 0.1612] 0.1014 [0.0511, 0.1518]	
arakh 2007	0.10144920	0.00684882	290	4	1.8%	0.0138 [0.0004, 0.0272]	_
Parikh 2008			46798	845	2.4%	0.0181 [0.0168, 0.0193]	
Ragni 1996	0.02173913		46	1	0.5%	0.0217 [-0.0204, 0.0639]	+-
Rempen 1995	0.00961538		104	1	1.4%	0.0096 [-0.0091, 0.0284]	 -
Ritchey 1993	0.05445026		1910	104	2.0%	0.0545 [0.0443, 0.0646]	_
Rogula 2007	0.0043315	0.00111596	3463	15	2.4%	0.0043 [0.0021, 0.0065]	-
Rosen 2009	0.00917431	0.00913213	109	1	1.4%	0.0092 [-0.0087, 0.0271]	+
Ryan 2004	0.03602058		583	21	1.6%	0.0360 [0.0209, 0.0511]	_
Sai 2007	0.08333333		36	3	0.1%	0.0833 [-0.0070, 0.1736]	
Saklani 2012	0.02416918	0.0084412	331	8	1.5%	0.0242 [0.0076, 0.0407]	_
Salum 2001	0.02511416		438	11	1.7%	0.0251 [0.0105, 0.0398]	_
Scholin 2011	0.02417303		786	19	1.9%	0.0242 [0.0134, 0.0349]	
Sowande 2011 Stanton 2010	0.03030303		33	1		0.0303 [-0.0282, 0.0888]	<u></u>
	0.01293103 0.04545455		232 22	3 1	1.7%	0.0129 [-0.0016, 0.0275] 0.0455 [-0.0416, 0.1325]	
Tashjian 2007 Taylor 2006	0.04545455		444	5	2.0%	0.0113 [0.0014, 0.0211]	_
Taylor 2000 Taylor 2010	0.02189781		411	9	1.7%	0.0219 [0.0077, 0.0360]	_
raylor 2010 Fsao 2007	0.00633484		1105	7	2.3%	0.0063 [0.0017, 0.0110]	-
ran Eijck 2008	0.15646259		147	23	0.3%	0.1565 [0.0977, 0.2152]	
/arkarakis 2007	0.03456221		434	15	1.5%	0.0346 [0.0174, 0.0517]	-
Wakhlu 2000	0.02816901		71	2		0.0282 [-0.0103, 0.0667]	
Vakhlu 2009	0.01449275			2			
	_		138	_	1.3%	0.0145 [-0.0054, 0.0344]	
Vang 1999		0.01705872	100	3	0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634]	-
Nang 2005	0.01315789	0.01705872 0.00924262	100 152	3 2	0.7% 1.4%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313]	-
Wang 1999 Wang 2005 Yamataka 1997		0.01705872 0.00924262	100 152 240	3 2 5	0.7% 1.4% 1.4%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389]	-
Vang 2005 ⁄amataka 1997 Subtotal (95% CI)	0.01315789 0.02083333	0.01705872 0.00924262 0.00921939	100 152 240 80841	3 2 5 1661	0.7% 1.4% 1.4% 80.3 %	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389]	7
Vang 2005 Yamataka 1997 Su btotal (95% CI) Heterogeneity: Tau² = 0.00;	0.01315789 0.02083333 Chi ² = 847.28	0.01705872 0.00924262 0.00921939 df= 65 (P < 0	100 152 240 80841	3 2 5 1661	0.7% 1.4% 1.4% 80.3 %	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389]	-
Vang 2005 'amataka 1997 iubtotal (95% CI) leterogeneity: Tau² = 0.00; 'est for overall effect: Z = 12	0.01315789 0.02083333 Chi ² = 847.28	0.01705872 0.00924262 0.00921939 df= 65 (P < 0	100 152 240 80841	3 2 5 1661	0.7% 1.4% 1.4% 80.3 %	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389]	-
Vang 2005 (amataka 1997 (aubtotal (95% CI) (eterogeneity: Tau² = 0.00; (est for overall effect: Z = 12 (.7.2 Prospective	0.01315789 0.02083333 Chi ^z = 847.28 2.60 (P < 0.000	0.01705872 0.00924262 0.00921939 , df = 65 (P < 0	100 152 240 80841 00001);	3 2 5 1661 ; ² = 92%	0.7% 1.4% 1.4% 80.3 %	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0388] 0.0246 [0.0208, 0.0284]	-
Vang 2005 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective Nexakis 2003	0.01315789 0.02083333 Chi ^z = 847.28 2.60 (P < 0.000 0.05263158	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001)	100 152 240 80841 .00001);	3 2 5 1661 ; I ^z = 92%	0.7% 1.4% 1.4% 80.3 %	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530]	-
Wang 2005 (amataka 1997 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau ² = 0.00; Fest for overall effect: Z = 12 8.7.2 Prospective Alexakis 2003 Aliq 1993	0.01315789 0.02083333 Chi ² = 847.28 2.60 (P < 0.000 0.05263158 0.2	0.01705872 0.00924262 0.00921939 , df = 65 (P < 0 001) 0.05122782 0.06761234	100 152 240 80841 00001); 19 35	3 2 5 1661 ; I ^z = 92% 1 7	0.7% 1.4% 1.4% 80.3 % 0.1% 0.1%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325]	-
Wang 2005 'amataka 1997 Sabtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 B.7.2 Prospective Nexakis 2003 titiq 1993 Cabot 2010	0.01315789 0.02083333 Chi ² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932	100 152 240 80841 00001); 19 35 530	3 2 5 1661 ; I ^z = 92% 1 7 4	0.7% 1.4% 1.4% 80.3 % 0.1% 0.1% 2.2%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149]	<u>-</u>
Wang 2005 'amataka 1997 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Test for overall effect: Z = 12 6.7.2 Prospective Nexakis 2003 titiq 1993 Cabot 2010 Catena 2012	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695	100 152 240 80841 000001); 19 35 530 181	3 2 5 1661 F = 92%	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435]	
Wang 2005 'amataka 1997 'amataka 1997 Subtotal (95% CI) -leterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective Nexakis 2003 titiq 1993 Cabot 2010 Catena 2012 Chin 2007	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791	100 152 240 80841 000001); 19 35 530 181 193	3 2 5 1661 ; = 92% 1 7 4 4	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153]	-
Vang 2005 'amataka 1997 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau* = 0.00; Fest for overall effect: Z = 12 S.7.2 Prospective Ulexakis 2003 stiq 1993 Dabot 2010 Catena 2012 Eshuis 2017 Eshuis 2010	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182	0.01705872 0.00924262 0.00921939 df= 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577	100 152 240 80841 00001); 19 35 530 181 193 55	3 2 5 1661 ; *= 92% 1 7 4 4 1 1	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535]	-
Wang 2005 'amataka 1997 Sabbtotal (95% CI) Heterogeneity: Tau* = 0.00; Fest for overall effect: Z = 12 I.T.2 Prospective Nexakis 2003 titiq 1993 Cabot 2010 Catena 2012 Chin 2007 Sshuis 2010 Fazio 2016	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613	0.01705872 0.00924262 0.00921939 df=65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.0184203	100 152 240 80841 00001); 19 35 530 181 193 55 1701	3 2 5 1661 F = 92%	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273]	
Vang 2005 'amataka 1997 'amataka 1997 subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective Mexakis 2003 stiq 1993 Cabot 2010 Catena 2012 chin 2007 Eshuis 2010 Fazio 2006 Hayashi 2008	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.02057613	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.0675932 0.00375932 0.01092695 0.00516791 0.01081577 0.00344203 0.00692029	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144	3 2 5 1661 : ≠= 92% 1 7 4 4 1 1 35 1	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 1.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205]	
Vang 2005 'amataka 1997 'amataka 1997 Subtotal (95% CI) -leterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 5.7.2 Prospective	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804	0.01705872 0.00924262 0.00921939 .df = 65 (P < 0 101) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00682029 0.00692029 0.00329179	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002	3 2 5 1661 1	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 1.7% 2.2%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0334] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0068 [-0.0066, 0.0205] 0.0068 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174]	
Vang 2005 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 5.7.2 Prospective Nexakis 2003 Val 1993 Dabot 2010 Catena 2012 Chin 2007 Eshuis 2010 Fazio 2006 Lee 2012 Lumley 2002	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804 0.003246753	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00682029 0.00329179 0.001428226	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154	3 2 1661 1661 17 = 92% 1 7 4 4 1 1 1 35 1 11 5	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 2.2% 0.7% 2.2% 0.9%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0162 [-0.049, 0.0153] 0.0162 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0605]	
Vang 2005 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective Nexakis 2003 titiq 1993 Cabot 2010 Catena 2012 Chin 2007 Eshuis 2010 Fazio 2010 Fazio 2006 Hayashi 2008 Lee 2012 Lumley 2002 Majewski 2005	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.00209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804 0.013246753 0.05095541	0.01705872 0.00924262 0.00921939 df= 65 (P < 0 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157	3 2 5 1661 F = 92% 1 7 4 4 1 1 35 1 11 5 8	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 2.0% 0.7% 2.2% 1.7% 2.2% 0.9% 0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0089 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854]	
Vang 2005 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective Mexakis 2003 titiq 1993 Cabot 2010 Catena 2012 Chin 2007 Eshuis 2010 Fazio 2006 Hayashi 2008 Lee 2012 Lumley 2002 Majewski 2005 Melson 2006	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057813 0.00694444 0.0103246753 0.05095541 0.00695541	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958	100 152 240 80841 000001); 19 35 530 181 193 55 1701 144 1002 154 157 784	3 2 5 1661 1 F = 92% 1 7 4 4 1 1 35 1 11 5 8 7	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 1.7% 2.2% 0.9% 0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0344] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0192 [-0.0171, 0.0535] 0.0193 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0854] 0.0089 [0.0023, 0.0155]	
Vang 2005 'amataka 1997 'amataka 1997 Subtotal (95% CI) -leterogeneity. Tau² = 0.00; Fest for overall effect: Z = 12 6.7.2 Prospective	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.0069444 0.01097804 0.03246753 0.05095541 0.00892857 0.03378378	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00518791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00339595 0.01485116	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148	3 2 5 1661 : ≠ = 92% 1 7 4 4 1 1 1 35 1 11 5 8 7 5	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 0.9% 0.9% 0.9%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0455] 0.0022 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0038 [0.0023, 0.0155] 0.0038 [0.00247, 0.0629]	
Vang 2005 (amataka 1997 Sabbtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 3.7.2 Prospective Nexakis 2003 Aiq 1993 Cabota 2010 Catena 2012 Chin 2007 Eshuis 2010 Fazio 2006 Hayashi 2008 Lee 2012 Lumley 2002 Majewski 2005 Velson 2006 Ng 2009 Pace 2002	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804 0.03246753 0.05095541 0.00892857 0.03378378 0.15384615	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.0082029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.10006825	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 13	3 2 5 1661 1 F = 92% 1 7 4 4 1 1 35 1 11 5 8 7 5	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 0.7% 2.2% 0.7% 2.2% 0.9% 0.7% 2.2%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0344] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0089 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0038, 0.0153] 0.0089 [0.00247, 0.0629] 0.1538 [0.0047, 0.0629] 0.1538 [0.0047, 0.0629]	
Wang 2005	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.0069444 0.01097804 0.03246753 0.05095541 0.00892857 0.03378378	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.10801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.10006825 0.00854678	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148	3 2 5 1661 : ≠ = 92% 1 7 4 4 1 1 1 35 1 11 5 8 7 5	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 0.9% 0.9% 0.9%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0054, 0.0344] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0082 [-0.0171, 0.0535] 0.0086 [-0.0171, 0.0535] 0.0086 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0182 [-0.0171, 0.0535] 0.0183 [-0.0171, 0.0535] 0.0323 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0338 [0.0047, 0.0629] 0.1538 [-0.0427, 0.3500] 0.0229 [0.0061, 0.0396]	
Wang 2005 'amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 3.7.2 Prospective Mexakis 2003 Atiq 1993 Cabot 2010 Catena 2012 Chin 2007 Eshuis 2010 Fazio 2006 Hayashi 2008 Lee 2012 Lumley 2002 Majewski 2005 Velson 2006 Ng 2009 Pace 2002 Pace 2002 Rosin 2007 Bileri 2008	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804 0.03246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01482026 0.01755047 0.00335958 0.01485116 0.10068825 0.0088264678 0.008864678 0.008864678 0.008864678	100 152 250 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 13	3 2 5 1661 F = 92% 1 1 7 4 4 1 1 35 1 1 11, 5 8 7	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 0.7% 2.2% 0.7% 2.2% 0.7% 2.2% 0.7% 2.2% 0.7% 2.2% 0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0022 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0174, 0.0535] 0.0206 [0.01045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0338 [0.0047, 0.0629] 0.1538 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0396] 0.1014 [0.0658, 0.1371]	
Wang 2005 (amataka 1997 Subtotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 3.7.2 Prospective Mexakis 2003 Atiq 1993 Cabot 2010 Catena 2012 Chin 2007 Eshuls 2010 Fazio 2006 Hayashi 2008 Lee 2012 Lumley 2002 Majewski 2005 Nelson 2006 Ng 2009 Pacce 2002 Rosin 2007	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00097804 0.03246753 0.05095541 0.03378378 0.15384615 0.02287582 0.10144928	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01482026 0.01755047 0.00335958 0.01485116 0.10068825 0.0088264678 0.008864678 0.008864678 0.008864678	100 152 240 80841 000001); 19 35 530 181 193 55 1701 144 1002 154 148 133 306 276	3 2 5 1661 1 F = 92% 1 7 4 4 1 1 1 1 5 8 7 5 2 2 7 28	0.7% 1.4% 80.3% 0.1% 0.1% 2.2% 2.0% 0.7% 2.2% 0.9% 0.7% 2.2% 0.9% 0.9% 0.5% 0.9% 0.7%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0022 [-0.0049, 0.0153] 0.0182 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0052 [-0.0049, 0.0153] 0.0182 [-0.0174, 0.0535] 0.0206 [0.01045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0338 [0.0047, 0.0629] 0.1538 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0396] 0.1014 [0.0658, 0.1371]	
Vang 2005 'amataka 1997 Subtotal (95% CI)	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.013246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582 0.10144928 0.03571429 Chi² = 57.12, i	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.100884678 0.01817361 0.02479875 df = 16 (P < 0.0	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 133 306 276 56 5754	3 2 5 1661 F = 92% 1 7 4 4 1 1 35 1 11 15 8 7 5 2 7 2 2 129	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 1.7% 2.2% 0.9% 0.7% 2.2% 0.9% 0.0% 1.5% 0.0%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0455] 0.0052 [-0.0049, 0.0153] 0.0162 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205] 0.0510 [0.0166, 0.0854] 0.0089 [-0.0055] 0.0318 [-0.0423, 0.0155] 0.0338 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0396] 0.1014 [0.0658, 0.1371] 0.0357 [-0.0129, 0.0843]	
Vang 2005 'amataka 1997 Subtotal (95% CI)	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.013246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582 0.10144928 0.03571429 Chi² = 57.12, i	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.100884678 0.01817361 0.02479875 df = 16 (P < 0.0	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 133 306 276 56 5754	3 2 5 1661 F = 92% 1 7 4 4 1 1 35 1 11 15 8 7 5 2 7 2 2 129	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 1.7% 2.2% 0.9% 0.7% 2.2% 0.9% 0.0% 1.5% 0.0%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0455] 0.0052 [-0.0049, 0.0153] 0.0162 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205] 0.0510 [0.0166, 0.0854] 0.0089 [-0.0055] 0.0318 [-0.0423, 0.0155] 0.0338 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0396] 0.1014 [0.0658, 0.1371] 0.0357 [-0.0129, 0.0843]	
Vang 2005 (amataka 1997 (amataka 1997 (amataka 1997 (ambtotal (95% CI)) (deterogeneity: Tau² = 0.00; (est for overall effect: Z = 12 (a.7.2 Prospective (alexakis 2003 (alexakis 2003 (alexakis 2010 (alexakis 2006 (alexakis 2005 (alexakis 2005 (alexakis 2005 (alexakis 2006 (alexakis 2006 (alexakis 2007 (alexakis 2007 (alexakis 2007 (alexakis 2008 (ale	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.013246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582 0.10144928 0.03571429 Chi² = 57.12, i	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.100884678 0.01817361 0.02479875 df = 16 (P < 0.0	100 152 240 80841 00001); 19 35 530 181 193 35 55 1701 144 11002 276 306 276 55 53	3 2 5 1661 F = 92% 1 7 4 4 1 1 35 1 1 11 5 8 7 5 2 7 2 2 7 2 8 2 2 7 2 8	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 0.1% 2.2% 1.2% 2.0% 0.7% 2.2% 0.9% 0.7% 2.2% 0.9% 0.7% 2.2% 0.9% 1.5% 0.0%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0162 [-0.0174, 0.0535] 0.0206 [0.0138, 0.0273] 0.0108 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0338 [0.0047, 0.0629] 0.1538 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0398] 0.1014 [0.0658, 0.1371] 0.0357 [-0.0129, 0.0843] 0.0200 [0.0126, 0.0274]	
Vang 2005 'amataka 1997 'amataka 1997 'authotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 'b.7.2 Prospective Mexakis 2003 dtq 1993 Cabot 2010 Catena 2012 Chin 2007 Feshuis 2010 Fazio 2006 Flayashi 2008 Flayashi 2008 Flayashi 2005 Flelson 2006 flay 2009 Flace 2002 Rosin 2007 Silleri 2008 Flawar 1997 Flathotal (95% CI) Flest for overall effect: Z = 5. Fotal (95% CI)	0.01315789 0.02083333 Chi² = 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.01097804 0.03246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582 0.10144928 0.03571429 Chi² = 57.12, 31 (P < 0.0000	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 001) 0.05122782 0.06761234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.10006825 0.00854678 0.01817361 0.02479875 df = 16 (P < 0.0	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 133 306 276 65 5754 0001); I	3 2 5 1661 F = 92% 1 1 7 4 4 1 1 1 1 1 5 8 7 7 2 8 7 2 1 2 1 2 1 2 1 7 2 8 2 7	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 0.2% 1.2% 2.0% 0.7% 2.2% 0.9% 0.7% 0.9% 0.7% 0.0% 1.5% 0.7% 0.4% 0.4% 0.4%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0455] 0.0052 [-0.0049, 0.0153] 0.0162 [-0.0171, 0.0535] 0.0206 [0.0138, 0.0273] 0.0069 [-0.0066, 0.0205] 0.0510 [0.0166, 0.0854] 0.0089 [-0.0055] 0.0318 [-0.0423, 0.0155] 0.0338 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0396] 0.1014 [0.0658, 0.1371] 0.0357 [-0.0129, 0.0843]	
Vang 2005 'amataka 1997 'amataka 1997 'abutotal (95% CI) Heterogeneity: Tau² = 0.00; Fest for overall effect: Z = 12 '.7.2 Prospective Nexakis 2003 titiq 1993 'abuto 2010 Catena 2012 Chin 2007 Feshuis 2010 Fazio 2006 Fayashi 2008 Fayashi 2008 Fayashi 2005 Felsion 2006 Fayashi 2005 Felsion 2006 Felsion 2006 Felsion 2006 Felsion 2007 Felsion 2007 Felsion 2008 Fayashi 2	0.01315789 0.02083333 Chi²= 847.28 2.60 (P < 0.000 0.05263158 0.2 0.00754717 0.02209945 0.00518135 0.01818182 0.02057613 0.00694444 0.03246753 0.05095541 0.00892857 0.03378378 0.15384615 0.02287582 0.10144928 0.03571429 Chi²= 57.12, 31 (P < 0.0000	0.01705872 0.00924262 0.00921939 df = 65 (P < 0 0.01) 0.05122782 0.0675234 0.00375932 0.01092695 0.00516791 0.01801577 0.00344203 0.00692029 0.00329179 0.01428226 0.01755047 0.00335958 0.01485116 0.10086426 0.100864678 0.01817361 0.02479875 df = 16 (P < 0.011)	100 152 240 80841 00001); 19 35 530 181 193 55 1701 144 1002 154 157 784 148 133 306 276 65 5754 0001); I	3 2 5 1661 F = 92% 1 1 7 4 4 1 1 1 1 1 5 8 7 7 2 8 7 2 1 2 1 2 1 2 1 7 2 8 2 7	0.7% 1.4% 1.4% 80.3% 0.1% 0.1% 0.2% 1.2% 2.0% 0.7% 2.2% 0.9% 0.7% 0.9% 0.7% 0.0% 1.5% 0.7% 0.4% 0.4% 0.4%	0.0145 [-0.0054, 0.0344] 0.0300 [-0.0034, 0.0634] 0.0132 [-0.0050, 0.0313] 0.0208 [0.0028, 0.0389] 0.0246 [0.0208, 0.0284] 0.0526 [-0.0478, 0.1530] 0.2000 [0.0675, 0.3325] 0.0075 [0.0002, 0.0149] 0.0221 [0.0007, 0.0435] 0.0052 [-0.0049, 0.0153] 0.0162 [-0.0174, 0.0535] 0.0206 [0.0138, 0.0273] 0.0108 [-0.0066, 0.0205] 0.0110 [0.0045, 0.0174] 0.0325 [0.0045, 0.0605] 0.0510 [0.0166, 0.0854] 0.0089 [0.0023, 0.0155] 0.0338 [0.0047, 0.0629] 0.1538 [-0.0423, 0.3500] 0.0229 [0.0061, 0.0398] 0.1014 [0.0658, 0.1371] 0.0357 [-0.0129, 0.0843] 0.0200 [0.0126, 0.0274]	-0.2 -0.1 0 0.1 0.

4.7.2. Table of sensitivity analysis of the incidence of reoperation for ASBO, impact of study design

Study	Point estimate	95%CI
All available studies	0.0237	0.0203-0.0271
Retrospective studies only	0.0246	0.0208-0.0284
Prospective studies only	0.0200	0.0126-0.0274

4.8.1. Sensitivity analysis of the incidence of reoperation for ASBO, stratified by publication date



4.8.2. Table of sensitivity analysis of the incidence of reoperation for ASBO, impact of publication date

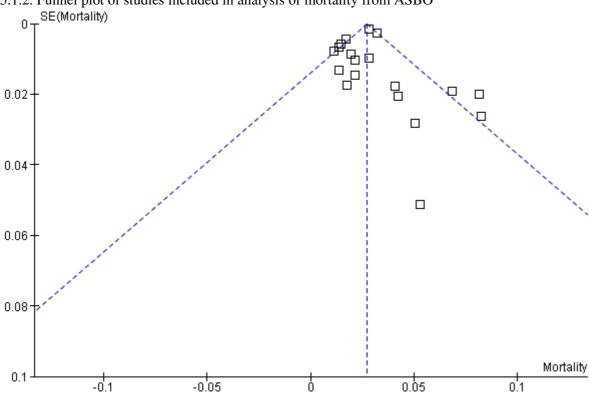
Study	Point estimate	95% CI
All studies included	0.0237	0.0203-0.0271
Studie published before the year 2000	0.0407	0.0290-0.0523
Studies published in the year 2000 and later	0.0210	0.0174-0.0246

5.1.1. Forest plot of In-hospital Mortality from ASBO

ASBO Mortality

5.1.1. I ofest plot of	F			Mortality		Mortality	Mortality
Study or Subgroup	Mortality	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Akgur 1991	0.01104972	0.00777005	181	2	7.1%	0.0110 [-0.0042, 0.0263]	 • -
Ambiru 2008	0.01706485	0.00436837	879	15	11.3%	0.0171 [0.0085, 0.0256]	-
Beyrout 2006	0.01937984	0.00858254	258	5	6.4%	0.0194 [0.0026, 0.0362]	-
Chopra 2003	0.01333333	0.01324415	75	1	3.5%	0.0133 [-0.0126, 0.0393]	+-
Chou 2005	0.06818182	0.01899956	176	12	1.9%	0.0682 [0.0309, 0.1054]	
Cox 1993a	0.04065041	0.01780608	123	5	2.2%	0.0407 [0.0058, 0.0755]	
Duron 2008	0.02797203	0.00975031	286	8	5.4%	0.0280 [0.0089, 0.0471]	-
Lo 2007	0.08108108	0.02006839	185	15	1.7%	0.0811 [0.0417, 0.1204]	
Mais 1998	0.04210526	0.02060465	95	4	1.7%	0.0421 [0.0017, 0.0825]	
Matter 1997	0.02105263	0.01041492	190	4	5.0%	0.0211 [0.0006, 0.0415]	
Menzies 2001	0.08181818	0.02613322	110	9	1.1%	0.0818 [0.0306, 0.1330]	
Miller 2000	0.01463415	0.00593049	410	6	9.2%	0.0146 [0.0030, 0.0263]	-
Nour 1996	0.05263158	0.05122782	19	1	0.3%	0.0526 [-0.0478, 0.1530]	
Parikh 2008	0.03183315	0.00260118	4555	145	13.8%	0.0318 [0.0267, 0.0369]	•
Seror 1993	0.01346801	0.00668851	297	4	8.3%	0.0135 [0.0004, 0.0266]	-
Shieh 1995	0.01754386	0.01738929	57	1	2.2%	0.0175 [-0.0165, 0.0516]	+
Shikata 1990	0.02795006	0.00147932	12415	347	14.9%	0.0280 [0.0251, 0.0308]	
Sosa 1993	0.02105263	0.01472893	95	2	3.0%	0.0211 [-0.0078, 0.0499]	+
Veselyi 1997	0.05	0.02813657	60	3	0.9%	0.0500 [-0.0051, 0.1051]	
Total (95% CI)			20466	589	100.0%	0.0249 [0.0193, 0.0304]	♦
Heterogeneity: Tau² =	0.00; Chi ² = 4:	2.72, df = 18 (F	0.00	09); l² = 589	%		-0.1 -0.05 0 0.05 0.1
Test for overall effect:	$Z = 8.82 (P \le 0)$	0.00001)					-0.1 -0.05 0 0.05 0.1 Mortality
							,

5.1.2. Funnel plot of studies included in analysis of mortality from ASBO



5.2.1. In hospital mortality from ASBO Stratification by anatomical region: Not Applicable 5.2.2. Forest plot of in hospital mortality from ASBO, comparison between operative and conservative treatment

			-			1	
	Opera	tive	Conser	vative		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Akgur 1991	2	96	0	85	4.8%	4.52 [0.21, 95.56]	-
Menzies 2001	4	41	5	69	15.3%	1.38 [0.35, 5.48]	- • -
Parikh 2008	33	1126	112	3429	32.0%	0.89 [0.60, 1.33]	+
Seror 1993	2	61	2	236	9.5%	3.97 [0.55, 28.74]	 • • • • • • • • • • • • • • • • • • •
Shikata 1990	116	3462	98	7323	33.7%	2.56 [1.95, 3.35]	
Sosa 1993	0	21	2	95	4.7%	0.87 [0.04, 18.78]	•
Total (95% CI)		4807		11237	100.0%	1.69 [0.83, 3.47]	•
Total events	157		219				
Heterogeneity: Tau ² :	= 0.38; Ch	i²=19.	83, df = 5	(P = 0.0)	01); $I^2 = 7$:	5%	0.04 0.4 1 10 10
Test for overall effect							0.01 0.1 1 10 10 Favours operative Favours conservative

5.3.1. Sensitivity analysis of in hospital mortality from ASBO, impact of individual studies

Study	Point estimate	95%CI
All studies included	0.0249	0.0193-0.0304
Akgur 1991	0.0258	0.0203-0.0314
Ambiru 2008	0.0258	0.0200-0.0316
Beyrout 2006	0.0253	0.0195-0.0311
Chopra 2003	0.0253	0.0196-0.0309
Chou 2005	0.0240	0.0186-0.0293
Cox 1993a	0.0245	0.0189-0.0301
Duron 2008	0.0247	0.0189-0.0305
Lo 2007	0.0238	0.0187-0.0289
Mais 1998	0.0246	0.0190-0.0302
Matter 1997	0.0251	0.0194-0.0309
Menzies 2001	0.0242	0.0188-0.0295
Miller 2000	0.0258	0.0202-0.0315
Nour 1996	0.0248	0.0192-0.0304
Parikh 2008	0.0242	0.0178-0.0307
Seror 1993	0.0258	0.0202-0.0315
Shieh 1995	0.0251	0.0194-0.0307
Shikata 1990	0.0254	0.0182-0.0325
Sosa 1993	0.0250	0.0193-0.0307
Veselyi 1997	0.0246	0.0191-0.0302

5.4.1. Sensitivity analysis of in Hospital mortality from ASBO, stratification by quality of study

			N	Mortality		Mortality	Mortality
Study or Subgroup	Mortality	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
4.3.1 Intermediate qu	ıality studies						
Ambiru 2008	0.01706485	0.00436837	879	15	11.3%	0.0171 [0.0085, 0.0256]	-
Beyrout 2006	0.01937984	0.00858254	258	5	6.4%	0.0194 [0.0026, 0.0362]	
Chou 2005	0.06818182	0.01899956	176	12	1.9%	0.0682 [0.0309, 0.1054]	
Cox 1993a	0.04065041	0.01780608	123	5	2.2%	0.0407 [0.0058, 0.0755]	
Duron 2008	0.02797203	0.00975031	286	8	5.4%	0.0280 [0.0089, 0.0471]	
Lo 2007	0.08108108	0.02006839	185	15	1.7%	0.0811 [0.0417, 0.1204]	
Mais 1998	0.04210526	0.02060465	95	4	1.7%	0.0421 [0.0017, 0.0825]	
Matter 1997	0.02105263	0.01041492	190	4	5.0%	0.0211 [0.0006, 0.0415]	
Menzies 2001	0.08181818	0.02613322	110	9	1.1%	0.0818 [0.0306, 0.1330]	
Miller 2000	0.01463415	0.00593049	410	6	9.2%	0.0146 [0.0030, 0.0263]	-
Nour 1996	0.05263158	0.05122782	19	1	0.3%	0.0526 [-0.0478, 0.1530]	
Seror 1993	0.01346801	0.00668851	297	4	8.3%	0.0135 [0.0004, 0.0266]	 • -
Shieh 1995	0.01754386	0.01738929	57	1	2.2%	0.0175 [-0.0165, 0.0516]	+
Shikata 1990	0.02795006	0.00147932	12415	347	14.9%	0.0280 [0.0251, 0.0308]	•
Sosa 1993	0.02105263	0.01472893	95	2	3.0%	0.0211 [-0.0078, 0.0499]	+
Veselyi 1997	0.05	0.02813657	60	3	0.9%	0.0500 [-0.0051, 0.1051]	+
Subtotal (95% CI)			15655	441	75.6%	0.0260 [0.0191, 0.0329]	◆
Heterogeneity: Tau ² =	0.00; Chi ² = 33	3.60, df = 15 (F	P = 0.004	4); I ² = 55%			
Test for overall effect:	Z = 7.38 (P < 0)	.00001)					
4.3.2 High quality stu	dies						
Akgur 1991	0.01104972	0.00777005	181	2	7.1%	0.0110 [-0.0042, 0.0263]	+
Chopra 2003	0.01333333	0.01324415	75	1	3.5%	0.0133 [-0.0126, 0.0393]	+•
Parikh 2008	0.03183315	0.00260118	4555	145	13.8%	0.0318 [0.0267, 0.0369]	-
Subtotal (95% CI)			4811	148	24.4%	0.0209 [0.0045, 0.0373]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 7.	92, df = 2 (P =	0.02); I^2	= 75%			
Test for overall effect:	Z = 2.50 (P = 0)	.01)					
Total (95% CI)			20466	589	100.0%	0.0249 [0.0193, 0.0304]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 43	2.72, df = 18 (F	o = 0.000	09); I ^z = 589	6		-0.1 -0.05 0 0.05 0.1
Test for overall effect:				21: 2-:			-0.1 -0.05 0 0.05 0.1 Mortality

5.4.2. Table Sensitivity analysis of in Hospital mortality from ASBO, impact of quality of studies

5. 1.2. Tubic Schollivity analysis of in Hospital mortality from 1.850, impact of quality of studies									
Study	Point estimate	95%CI							
All available studies	0.0249	0.0193-0.0304							
Low Quality studies only	NA	NA							
Intermediate Quality studies only	0.0260	0.0191-0.0329							
High studies only	0.0209	0.0045-0.0373							

5.5.1. Sensitivity analysis of the In Hospital mortality from ASBO, retrospective vs. prospective

		ASBO	Mortality		Mortality	Mortality	
Mortality	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% 0	:1
0.01104972	0.00777005	181	2	7.1%	0.0110 [-0.0042, 0.0263]	 • -	
0.01706485	0.00436837	879	15	11.3%	0.0171 [0.0085, 0.0256]		
0.01937984	0.00858254	258	5	6.4%	0.0194 [0.0026, 0.0362]		
0.01333333	0.01324415	75	1	3.5%	0.0133 [-0.0126, 0.0393]	+•	
0.06818182	0.01899956	176	12	1.9%	0.0682 [0.0309, 0.1054]	-	-
0.04065041	0.01780608	123	5	2.2%	0.0407 [0.0058, 0.0755]		_
0.08108108	0.02006839	185	15	1.7%	0.0811 [0.0417, 0.1204]	-	•
0.04210526	0.02060465	95	4	1.7%	0.0421 [0.0017, 0.0825]	-	_
0.02105263	0.01041492	190	4	5.0%	0.0211 [0.0006, 0.0415]		
0.08181818	0.02613322	110	9	1.1%	0.0818 [0.0306, 0.1330]		•
0.01463415	0.00593049	410	6	9.2%	0.0146 [0.0030, 0.0263]	-	
0.05263158	0.05122782	19	1	0.3%	0.0526 [-0.0478, 0.1530]	-	
0.03183315	0.00260118	4555	145	13.8%	0.0318 [0.0267, 0.0369]	-	
0.01346801	0.00668851	297	4	8.3%	0.0135 [0.0004, 0.0266]	 • 	
0.01754386	0.01738929	57	1	2.2%	0.0175 [-0.0165, 0.0516]	+	
0.02795006	0.00147932	12415	347	14.9%	0.0280 [0.0251, 0.0308]	-	
0.02105263	0.01472893	95	2	3.0%	0.0211 [-0.0078, 0.0499]	+	
0.05	0.02813657	60	3	0.9%	0.0500 [-0.0051, 0.1051]	+	
		20180	581	94.6%	0.0247 [0.0189, 0.0305]	♦	
0.00; Chi ² = 42	2.71, df = 17 (F	o.00 = °	05); I ^z = 609	6			
Z= 8.37 (P < 0	.00001)						
0.02797203	0.00975031	286	8	5.4%	0.0280 [0.0089, 0.0471]		
		286	8	5.4%	0.0280 [0.0089, 0.0471]	•	
olicable							
Z = 2.87 (P = 0)	.004)						
		20466	589	100.0%	0.0249 [0.0193, 0.0304]	•	
0.00; Chi ² = 42	2.72, df = 18 (F	o.00 = °	09); I ^z = 589	6		04 005 0 005	
			• •				
•), I² = 0%			Mortanty	1
(2	0.01104972 0.01706485 0.01937984 0.01333333 0.06818182 0.04065041 0.08108108 0.04210526 0.02105263 0.08181818 0.01463415 0.05263158 0.03183315 0.01754386 0.02795006 0.02105263 0.05 0.00; Chi² = 42 Z = 8.37 (P < 0	0.01104972	Mortality SE Total 0.01104972 0.00777005 181 0.01706485 0.00436837 879 0.01937984 0.00858254 258 0.013333333 0.01324415 75 0.06818182 0.01899956 176 0.04065041 0.01780608 123 0.08108108 0.02006839 185 0.04210526 0.02060465 95 0.02105263 0.01041492 190 0.08181818 0.02613322 110 0.01463415 0.00593049 410 0.05263158 0.05122782 19 0.03183315 0.00260118 4555 0.01754386 0.01738929 57 0.02795006 0.001472893 95 0.00; Chi² = 42.71, df = 17 (P = 0.00 20180 0.00; Chi² = 42.71, df = 17 (P = 0.00 286 0licable 22.87 (P = 0.004)	Mortality SE Total Total 0.01104972 0.00777005 181 2 0.01706485 0.00436837 879 15 0.01937984 0.00858254 258 5 0.01333333 0.01324415 75 1 0.06818182 0.01899956 176 12 0.04065041 0.01780608 123 5 0.08108108 0.02006839 185 15 0.04210526 0.02060465 95 4 0.02105263 0.01041492 190 4 0.08181818 0.02613322 110 9 0.01463415 0.00593049 410 6 0.05263158 0.05122782 19 1 0.03183315 0.00260118 4555 145 0.01346801 0.00668851 297 4 0.02795006 0.001472893 95 2 0.02105263 0.01472893 95 2 0.00; Chi²= 42.71, df= 17 (P = 0.0005); l²= 609 8 </td <td>Mortality SE Total Total Weight 0.01104972 0.00777005 181 2 7.1% 0.01706485 0.00436837 879 15 11.3% 0.01937984 0.00858254 258 5 6.4% 0.01333333 0.01324415 75 1 3.5% 0.06818182 0.01899956 176 12 1.9% 0.04065041 0.01789608 123 5 2.2% 0.08108108 0.02006839 185 15 1.7% 0.04210526 0.02060465 95 4 1.7% 0.02105263 0.01041492 190 4 5.0% 0.08181818 0.02613322 110 9 1.1% 0.01463415 0.00593049 410 6 9.2% 0.03183315 0.00260118 4555 145 13.8% 0.01754386 0.01738929 57 1 2.2% 0.02795006 0.001472893 95 2 3.0%</td> <td> Mortality</td> <td>Mortality SE Total Veight N, Random, 95% CI N, Random, 95% CI 0.01104972 0.00777005 181 2 7.1% 0.0110 [-0.0042, 0.0263] 0.01706485 0.00436837 879 15 11.3% 0.0171 [0.0085, 0.0266] 0.01937984 0.00858254 258 5 6.4% 0.0194 [0.0026, 0.0362] 0.01333333 0.01324415 75 1 3.5% 0.0133 [0.0126, 0.0393] 0.04065041 0.01780608 123 5 2.2% 0.0407 [0.0058, 0.0755] 0.08108108 0.0206639 185 15 1.7% 0.0811 [0.0417, 0.1204] 0.02105263 0.01041492 190 4 5.0% 0.0211 [0.0006, 0.0415] 0.02105263 0.01041492 190 4 5.0% 0.0211 [0.0006, 0.0415] 0.02105263 0.05122782 19 1.1% 0.0818 [0.0306, 0.1330] 0.03183315 0.00260118 4555 145 13.8% 0.0318 [0.0267, 0.0369] 0.01754386 0.0147932 12415</td>	Mortality SE Total Total Weight 0.01104972 0.00777005 181 2 7.1% 0.01706485 0.00436837 879 15 11.3% 0.01937984 0.00858254 258 5 6.4% 0.01333333 0.01324415 75 1 3.5% 0.06818182 0.01899956 176 12 1.9% 0.04065041 0.01789608 123 5 2.2% 0.08108108 0.02006839 185 15 1.7% 0.04210526 0.02060465 95 4 1.7% 0.02105263 0.01041492 190 4 5.0% 0.08181818 0.02613322 110 9 1.1% 0.01463415 0.00593049 410 6 9.2% 0.03183315 0.00260118 4555 145 13.8% 0.01754386 0.01738929 57 1 2.2% 0.02795006 0.001472893 95 2 3.0%	Mortality	Mortality SE Total Veight N, Random, 95% CI N, Random, 95% CI 0.01104972 0.00777005 181 2 7.1% 0.0110 [-0.0042, 0.0263] 0.01706485 0.00436837 879 15 11.3% 0.0171 [0.0085, 0.0266] 0.01937984 0.00858254 258 5 6.4% 0.0194 [0.0026, 0.0362] 0.01333333 0.01324415 75 1 3.5% 0.0133 [0.0126, 0.0393] 0.04065041 0.01780608 123 5 2.2% 0.0407 [0.0058, 0.0755] 0.08108108 0.0206639 185 15 1.7% 0.0811 [0.0417, 0.1204] 0.02105263 0.01041492 190 4 5.0% 0.0211 [0.0006, 0.0415] 0.02105263 0.01041492 190 4 5.0% 0.0211 [0.0006, 0.0415] 0.02105263 0.05122782 19 1.1% 0.0818 [0.0306, 0.1330] 0.03183315 0.00260118 4555 145 13.8% 0.0318 [0.0267, 0.0369] 0.01754386 0.0147932 12415

5.6.1. Sensitivity analysis of the In Hospital mortality from ASBO, Publication date

			ASBO	Mortality		Mortality	Mortality
Study or Subgroup	Mortality	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
4.5.1 Published befor	e the year 200	00					
Akgur 1991	0.01104972	0.00777005	181	2	7.1%	0.01 [-0.00, 0.03]	 • -
Cox 1993a	0.04065041	0.01780608	123	5	2.2%	0.04 [0.01, 0.08]	
Mais 1998	0.04210526	0.02060465	95	4	1.7%	0.04 [0.00, 0.08]	
Matter 1997	0.02105263	0.01041492	190	4	5.0%	0.02 [0.00, 0.04]	
Nour 1996	0.05263158	0.05122782	19	1	0.3%	0.05 [-0.05, 0.15]	
Seror 1993	0.01346801	0.00668851	297	4	8.3%	0.01 [0.00, 0.03]	 • -
Shieh 1995	0.01754386	0.01738929	57	1	2.2%	0.02 [-0.02, 0.05]	+
Shikata 1990	0.02795006	0.00147932	12415	347	14.9%	0.03 [0.03, 0.03]	
Sosa 1993	0.02105263	0.01472893	95	2	3.0%	0.02 [-0.01, 0.05]	+
Veselyi 1997	0.05	0.02813657	60	3	0.9%	0.05 [-0.01, 0.11]	
Subtotal (95% CI)			13532	373	45.6%	0.02 [0.02, 0.03]	♦
Heterogeneity: Tau² =	0.00; Chi ² = 1°	1.52, df = 9 (P	= 0.24);	l²= 22%			
Test for overall effect:	Z = 7.01 (P < 0)	.00001)					
4.5.2 Published in the	e year 2000 or	later					
Ambiru 2008	0.01706485	0.00436837	879	15	11.3%	0.02 [0.01, 0.03]	-
Beyrout 2006	0.01937984	0.00858254	258	5	6.4%	0.02 [0.00, 0.04]	
Chopra 2003	0.01333333	0.01324415	75	1	3.5%	0.01 [-0.01, 0.04]	+-
Chou 2005	0.06818182	0.01899956	176	12	1.9%	0.07 [0.03, 0.11]	
Duron 2008	0.02797203	0.00975031	286	8	5.4%	0.03 [0.01, 0.05]	
Lo 2007	0.08108108	0.02006839	185	15	1.7%	0.08 [0.04, 0.12]	
Menzies 2001	0.08181818	0.02613322	110	9	1.1%	0.08 [0.03, 0.13]	
Miller 2000	0.01463415	0.00593049	410	6	9.2%	0.01 [0.00, 0.03]	
Parikh 2008	0.03183315	0.00260118	4555	145	13.8%	0.03 [0.03, 0.04]	
Subtotal (95% CI)			6934	216	54.4%	0.03 [0.02, 0.04]	•
Heterogeneity: Tau² =	0.00; Chi² = 31	1.20, df = 8 (P	$= 0.000^{\circ}$	1); I² = 74%			
Test for overall effect:	Z= 5.53 (P < 0	.00001)					
Total (95% CI)			20466	589	100.0%	0.02 [0.02, 0.03]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 43	2.72, df = 18 (F	P = 0.00i	09); I ^z = 589	6		
Test for overall effect:	Z = 8.82 (P < 0)	.00001)		• •			-0.1 -0.05 0 0.05 0.1
Test for subgroup diff	•		P = 0.35), I²= 0%			Mortality
				_			

6.1.1. Table of qualitative analysis of length of hospital stay for treatment of ASBO 5 studies included in meta-analysis

15 in qualitative analysis qualitative analysis

Study	Total g	roup	Conserv	ative treatment	Operatively treated		
	N	LOS (mean ± SD)	N	$LOS (mean \pm SD)$	N	$LOS (mean \pm SD)$	
Alwan 1999	332	8 (0 -156) *	-	-	-	-	
Beyrout 2006	258	7 (1 – 63) †	-	-	-	-	
Borzellino 2004	65	4.4 (1-22) †	-	-	65	4.4 (1-22) †	
Kawamura 2010	10	11.4 ± 7.4	7	11.1 ± 8.9	3	12.0 ± 1.7	
Khaikin 2007	72	7-13 [‡]	-	-	72	7-13 [‡]	
Kössi 2004	123	7 ± 0.6	-	-	-	-	
Menzies 2001	110	10.5 (1-45) †	69	7 (1-23) †	41	16.3(2 - 45) [†]	
Miller 2002	-	-	23	6 (2 – 33) *	7	12 (9 – 17)*	
Miller 2000	-	-	267	4 (NA) *	143	12 (NA) *	
Parikh 2008	4555	$10.6 \pm NA$	3429	$9.5 \pm NA$	1126	14 ± NA	
Rosin 2000	21	6.9 ± 5.1	-	-	21	6.9 ± 5.1	
Shih 2003	293	6.5 ± 3.0	220	6.9 ± 2.9	73	5.9 ± 2.8	
Sosa 1993	116	$13.4 (2 - NA)^{\dagger}$	95	$13.7 (2 - NA)^{\dagger}$	21	$12.3 (6-48)^{\dagger}$	
Suzuki 2003	17	9.9 ± 4.4	-	-	-	-	
Wang 2009	46	$8.8(6-20)^{\dagger}$	-	-	-	-	

NA not available;

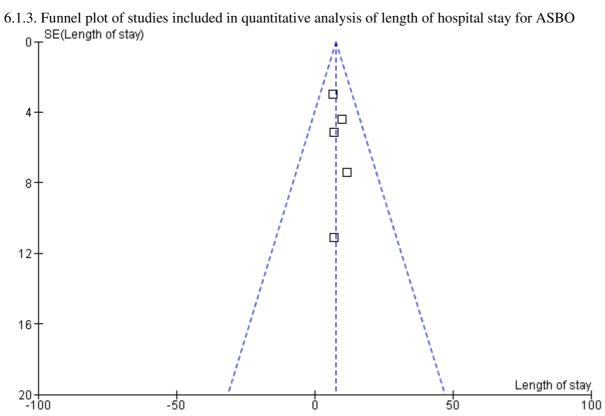
^{*}Median(Range);

[†] Mean (range), only used for articles that provided insufficient data to extract Mean and SD or Median and Range;

[‡] Khaikin 2007: median LOS: 7 in 31 patients receiving laparoscopic surgery, 8 in 10 patients after conversion, and 13 in 31 patients receiving open surgery.

6.1.2. Forest plot of length of hospital stay for treatment of ASBO

			N			Length of stay	Length of stay
Study or Subgroup	Length of stay	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Kawamura 2010	11.4	7.4	10	0	8.0%	11.40 [-3.10, 25.90]	-
Kössi 2004	7	11.1	123	0	3.6%	7.00 [-14.76, 28.76]	
Rosin 2000	6.9	5.1	21	0	16.9%	6.90 [-3.10, 16.90]	 • -
Shih 2003	6.5	3	293	0	48.8%	6.50 [0.62, 12.38]	=
Suzuki 2003	9.9	4.4	17	0	22.7%	9.90 [1.28, 18.52]	-
Total (95% CI)			464	0	100.0%	7.75 [3.64, 11.86]	♦
Heterogeneity: Tau² =	: 0.00; Chi² = 0.69		-100 -50 0 50 100				
Test for overall effect:	Z = 3.70 (P = 0.0)	002)					Length of stay



- 6.2.1. Length of hospital stay for ASBO, by anatomical location: Not applicable
- 6.3.1. Length of hospital stay for ASBO, by surgical technique: Not applicable

6.4.1. Sensitivity Analysis of Length of hospital stay for ASBO, impact of individual studies

Study	Point estimate	95% CI
All studies included	7.06	5.92-8.19
Kawamura 2010	7.03	5.89-8.17
Kössi 2004	7.78*	3.59-11.96
Rosin 2000	7.06	5.92-8.20
Shih 2003	7.08	5.92-8.23
Suzuki 2003	7.01	5.87-8.15

^{*&}gt;10% impact on point estimate

- 6.5.1. Sensitivity Analysis of Length of hospital stay for ASBO, impact of quality of studies: Not applicable, All studies in quantitative analysis have intermediate quality
- 6.6.1. Sensitivity Analysis of Length of hospital stay for ASBO, impact of study design: Not applicable, All studies in quantitative analysis retrospective
- 6.7.1. Sensitivity Analysis for Length of hospital stay for ASBO, impact of date of publication: Not applicable, All studies in quantitative analysis published in the year 2000 or later

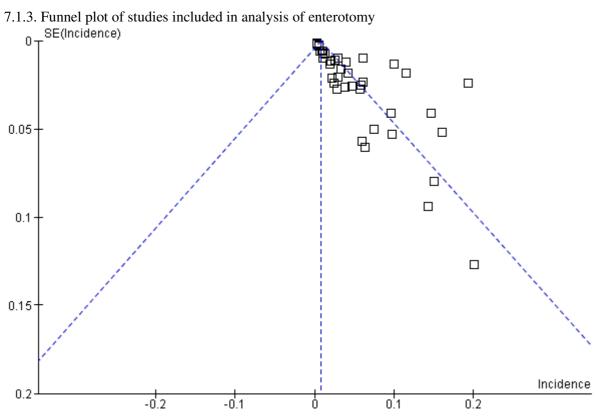
7.1.1. Forest plot of the incidence of enterotomy, including all studies

Reoperations Enterotomy

			Reoperations E	nterotomy		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Akgur 1991	0.04166667	0.01824156	120	5	2.5%	0.0417 [0.0059, 0.0774]	-
Alwan 1999	0.03952569	0.01224961	253	10	3.6%	0.0395 [0.0155, 0.0635]	-
Baccari 2009	0.025	0.0110397	200	5	3.9%	0.0250 [0.0034, 0.0466]	-
Baghai 2009	0.2	0.12649111	10	2	0.1%	0.2000 [-0.0479, 0.4479]	
Becmeur 1998	0.05813953	0.02523364	86	5	1.7%	0.0581 [0.0087, 0.1076]	
Ben-Haim 2002	0.06	0.02374868	100	6	1.8%	0.0600 [0.0135, 0.1065]	
Borzellino 2004	0.04615385	0.02602474	65	3	1.6%	0.0462 [-0.0049, 0.0972]	
3ouasker 2010	0.01287554	0.00738568	233	3	4.7%	0.0129 [-0.0016, 0.0274]	-
Boukerrou 2001	0.0625	0.06051536	16	1	0.4%	0.0625 [-0.0561, 0.1811]	- ·
Burcos 2002	0.00442478	0.00312186	452	2	5.4%	0.0044 [-0.0017, 0.0105]	•
Chopra 2003	0.14666667	0.04085022	75	11	0.8%	0.1467 [0.0666, 0.2267]	
Ercan 2009	0.00295421	0.00208585	677	2	5.5%	0.0030 [-0.0011, 0.0070]	•
errari 2008	0.01	0.00994987	100	1	4.1%	0.0100 [-0.0095, 0.0295]	 -
evang 2004	0.06039076	0.01003933	563	34	4.1%	0.0604 [0.0407, 0.0801]	-
inan 1997	0.07407407	0.05040102	27	2	0.5%	0.0741 [-0.0247, 0.1729]	+
rancois 1994	0.09615385	0.0408817	52	5	0.8%	0.0962 [0.0160, 0.1763]	
reys 1994	0.00833333	0.00586795	240	2	5.0%	0.0083 [-0.0032, 0.0198]	 -
uchs 1992		0.00586503	170	1		0.0059 [-0.0056, 0.0174]	+
lusain 2001		0.01143095	150	3		0.0200 [-0.0024, 0.0424]	 -
ohanet 1999	0.02898551		276	8	4.1%	0.0290 [0.0092, 0.0488]	-
(awamura 2009		0.02738926	36	1		0.0278 [-0.0259, 0.0815]	+
(eck 1994	0.16	0.05184593	50	8	0.5%	0.1600 [0.0584, 0.2616]	
Kirshtein 2002		0.01359627	103	2		0.0194 [-0.0072, 0.0461]	 -
Kolmorgen 1998	0.00506971	0.00252842	789	4	5.5%	0.0051 [0.0001, 0.0100]	•
Kumakiri 2010	0.11400651	0.0181389	307	35	2.6%	0.1140 [0.0785, 0.1496]	
(yzer 1999		0.02617498	53	2		0.0377 [-0.0136, 0.0890]	 -
_eBlanc 2003		0.00703562	200	2		0.0100 [-0.0038, 0.0238]	←
Naguib 2012		0.02048913	68	2		0.0294 [-0.0107, 0.0696]	
Oliveira 1997		0.09352195	14	2		0.1429 [-0.0404, 0.3262]	+
Parent 1995		0.05310032	31	3		0.0968 [-0.0073, 0.2008]	
Perrone 2005		0.01625342	121	4	2.9%	0.0331 [0.0012, 0.0649]	
etersen 2009		0.02736402	71	4	1.5%	0.0563 [0.0027, 0.1100]	
etros 2011		0.02409097	41	1		0.0244 [-0.0228, 0.0716]	+
Sato 2001	0.05882353		17	1		0.0588 [-0.0530, 0.1707]	
Shayani 2002	0.15	0.0798436	20	3		0.1500 [-0.0065, 0.3065]	
Biddigui 2010		0.00164878	1049	3		0.0029 [-0.0004, 0.0061]	
en Broek 2012	0.09960159		502	50	3.4%	0.0996 [0.0734, 0.1258]	-
an Der Krabben 2000	0.19259259		270	52	1.8%	0.1926 [0.1456, 0.2396]	
arnell 2008		0.02104903	47	1	0.0%		
otal (95% CI)			7607	290	100.0%	0.0331 [0.0254, 0.0407]	
Heterogeneity: Tau² = 0.0	10: Chi² = 262 9	I8 df=37 (P <					
.o.o.ogonom, raa = 0.0		21 21 - 21 /t .	0.000017,1 - 00				-0.2 -0.1 0 0.1 0.2

7.1.2. Forest plot of the incidence of enterotomy during reoperations with adhesiolysis

			Reoperations	Enterotomy		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Akgur 1991	0.04166667	0.01824156	120	5	8.3%	0.0417 [0.0059, 0.0774]	-
Alwan 1999	0.03952569	0.01224961	253	10	9.5%	0.0395 [0.0155, 0.0635]	-
Baghai 2009	0.2	0.12649111	10	2	0.7%	0.2000 [-0.0479, 0.4479]	
Becmeur 1998	0.05813953	0.02523364	86	5	6.8%	0.0581 [0.0087, 0.1076]	
Chopra 2003	0.14666667	0.04085022	75	11	4.2%	0.1467 [0.0666, 0.2267]	_
Ercan 2009	0.00295421	0.00208585	677	2	10.8%	0.0030 [-0.0011, 0.0070]	•
Francois 1994	0.09615385	0.0408817	52	5	4.2%	0.0962 [0.0160, 0.1763]	
Freys 1994	0.01538462	0.01079456	130	2	9.8%	0.0154 [-0.0058, 0.0365]	 -
Fuchs 1992	0.00588235	0.00586503	170	1	10.5%	0.0059 [-0.0056, 0.0174]	<u>+</u>
Johanet 1999	0.02898551	0.01009831	276	8	9.9%	0.0290 [0.0092, 0.0488]	-
Kumakiri 2010	0.15909091	0.02465959	220	35	6.9%	0.1591 [0.1108, 0.2074]	
Parent 1995	0.1	0.05477226	30	3	2.8%	0.1000 [-0.0074, 0.2074]	
Petros 2011	0.05882353	0.05706721	17	1	2.7%	0.0588 [-0.0530, 0.1707]	
Sato 2001	0.05882353	0.05706721	17	1	2.7%	0.0588 [-0.0530, 0.1707]	+
Shayani 2002	0.15	0.0798436	20	3	1.6%	0.1500 [-0.0065, 0.3065]	-
Ten Broek 2012	0.12135922	0.01608768	412	50	8.7%	0.1214 [0.0898, 0.1529]	
Total (95% CI)			2565	144	100.0%	0.0580 [0.0369, 0.0791]	•
Heterogeneity: Tau² = Test for overall effect:		•	(P < 0.00001); F	= 89%			-0.2 -0.1 0 0.1 0.2 Incidence



7.2.1. Best and worst case scenario for the incidence of enterotomy: Not applicable, no loss to follow-up for this outcome

7.3.1. Forest plot of the incidence of enterotomy, stratified by anatomical location Reoperations Enterotomy Incidence

Study or Subgroup	Incidence	SE	eoperations Enter Total	_	Weight	Incidence IV, Random, 95% Cl	Incidence IV, Random, 95% CI
3.1 General Surgery							
orzellino 2004	0.04615385	0.02602474	65	3	1.6%	0.0462 [-0.0049, 0.0972]	
urcos 2002	0.00442478	0.00312186	452	2	5.3%	0.0044 [-0.0017, 0.0105]	+
hopra 2003	0.14666667	0.04085022	75	11	0.8%	0.1467 [0.0666, 0.2267]	·
evang 2004	0.06039076		563	34	4.0%	0.0604 [0.0407, 0.0801]	-
rancois 1994	0.09615385	0.0408817	52	5	0.8%	0.0962 [0.0160, 0.1763]	
reys 1994	0.00833333		240	2	4.9%	0.0083 [-0.0032, 0.0198]	<u>+</u> -
Johanet 1999	0.02898551		276	8	4.0%	0.0290 [0.0092, 0.0488]	
Parent 1995	0.09677419		31	3	0.5%	0.0968 [-0.0073, 0.2008]	
ato 2001	0.05882353		17	1	0.4%		
				50			
Ten Broek 2012 Subtotal (95% CI)	0.09960159	0.01336381	502 2273	119	3.3% 25.6 %	0.0996 [0.0734, 0.1258] 0.0517 [0.0277, 0.0758]	_
teterogeneity: Tau² = 0.0	0: Chi² = 93.91	. df = 9 (P < 0.0		113	23.070	0.0517 [0.0277, 0.0750]	
est for overall effect: Z=			,,,				
7.3.2 Lower GI surgery							
Nwan 1999	0.03952569		253	10	3.6%	0.0395 [0.0155, 0.0635]	
Kawamura 2009	0.02777778	0.02738926	36	1	1.5%	0.0278 [-0.0259, 0.0815]	
Keck 1994	0.16	0.05184593	50	8	0.5%	0.1600 [0.0584, 0.2616]	
Naguib 2012	0.02941176	0.02048913	68	2	2.2%	0.0294 [-0.0107, 0.0696]	+
Oliveira 1997	0.14285714	0.09352195	14	2	0.2%	0.1429 [-0.0404, 0.3262]	+
Petersen 2009	0.05633803		71	4	1.5%	0.0563 [0.0027, 0.1100]	
Shayani 2002	0.15	0.0798436	20	3	0.2%	0.1500 [-0.0065, 0.3065]	
an Der Krabben 2000	0.19259259		270	52	1.8%	0.1926 [0.1456, 0.2396]	
Subtotal (95% CI)	55255255	5.0200001	782	82	11.3%	0.0870 [0.0376, 0.1363]	•
Heterogeneity: Tau² = 0.0 Test for overall effect: Z =			0001); l² = 84%			•	
.3.3 Hepato- Billiary Par		•					
Bouasker 2010	0.01287554	_	233	3	4.6%	0.0129 [-0.0016, 0.0274]	-
Ercan 2009	0.01287334		233 677	2			ļ.
						0.0030 [-0.0011, 0.0070]	Ĺ
uchs 1992 Subtotal (95% CI)	0.00588235	v.vv5865U3	170 1080	1 6	4.9% 14.9 %	0.0059 [-0.0056, 0.0174] 0.0039 [0.0002, 0.0076]	T
leterogeneity: Tau²= 0.0		•		Ü	. 4.0 //		
est for overall effect: Z=	2.06 (P = 0.04)	1					
7.3.4 Abdominal wall sur Baccari 2009		0.0110397	200	5	3.8%	0.0250 [0.0034, 0.0466]	_
	0.025						
Baghai 2009		0.12649111	10	2	0.1%	0.2000 [-0.0479, 0.4479]	
Ben-Haim 2002		0.02374868	100	6	1.8%	0.0600 [0.0135, 0.1065]	
errari 2008		0.00994987	100	1	4.0%	0.0100 [-0.0095, 0.0295]	†
Kirshtein 2002	0.01941748		103	2	3.3%		 •
(yzer 1999	0.03773585		53	2	1.6%	0.0377 [-0.0136, 0.0890]	
LeBlanc 2003		0.00703562	200	2	4.7%	0.0100 [-0.0038, 0.0238]	 -
Perrone 2005	0.03305785	0.01625342	121	4	2.8%	0.0331 [0.0012, 0.0649]	
arnell 2008/	0.0212766	0.02104903	47	1	2.1%	0.0213 [-0.0200, 0.0625]	+:-
Subtotal (95% CI)			934	25		0.0192 [0.0097, 0.0288]	♦
Heterogeneity: Tau² = 0.0 Test for overall effect: Z =		•); I² = 11%				
.3.5 Gynecological Surg	•	-					
Roukerrou 2001	_	0.06051536	16	1	0.4%	0.0625 [-0.0561, 0.1811]	
inan 1997	0.07407407		27	2		0.0741 [-0.0247, 0.1729]	
		0.05040102					
Husain 2001			150	3		0.0200 [-0.0024, 0.0424]	Ĺ-
Kolmorgen 1998	0.00506971		789	4	5.4%	0.0051 [0.0001, 0.0100]	Γ
Kumakiri 2010	0.11400651	0.0181389	307	35	2.5%	0.1140 [0.0785, 0.1496]	
Subtotal (95% CI)			1289	45	12.5%	0.0483 [0.0057, 0.0909]	-
leterogeneity: Tau² = 0.0 'est for overall effect: Z =	•		0001); I²= 90%				
'.3.6 Urological Surgery		0.02409097	41	1	1.8%	0.0244 [-0.0228, 0.0716]	+
	0.074.39074		1049	3	5.5%	0.0029 [-0.0004, 0.0061]	.
Petros 2011		N NN 184979	1048	4		0.0030 [-0.0003, 0.0062]	
Petros 2011 Biddiqui 2010	0.00285987	0.00164878	1090				
etros 2011 iddiqui 2010 i ubtotal (95% CI)	0.00285987		1090 \∵₽= 0%	•			
etros 2011 Siddiqui 2010 S ubtotal (95% CI) Heterogeneity: Tau ^z = 0.0	0.00285987 0; Chi² = 0.79,	df=1 (P=0.37		•			
Petros 2011 Siddiqui 2010 S ubtotal (95% CI) Heterogeneity: Tau² = 0.0 Test for overall effect: Z =	0.00285987 0; Chi² = 0.79,	df=1 (P=0.37		•			
Petros 2011 Siddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = V.3.7 Pediatric Surgery	0.00285987 0; Chi² = 0.79,	df=1 (P=0.37		5	2.5%	0.0417 [0.0059, 0.0774]	
r.s.o Urological Surgery Petros 2011 Siddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = 7.3.7 Pediatric Surgery Akgur 1991 Becmeur 1998	0.00285987 0; Chi ^z = 0.79, 1.80 (P = 0.07) 0.04166667	df=1 (P=0.37) 0.01824156); I ^z = 0%		2.5% 1.7%		
Petros 2011 Siddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = 7.3.7 Pediatric Surgery Ukgur 1991 Becmeur 1998	0.00285987 0; Chi² = 0.79, 1.80 (P = 0.07)	df=1 (P=0.37) 0.01824156); ² = 0% 120	5		0.0417 [0.0059, 0.0774] 0.0581 [0.0087, 0.1076] 0.0473 [0.0183, 0.0763]	
etros 2011 Siddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau ² = 0.0 Fest for overall effect: Z = C.3.7 Pediatric Surgery Skgur 1991 Becmeur 1998 Subtotal (95% CI) Heterogeneity: Tau ² = 0.0	0.00285987 0; Chi ² = 0.79, 1.80 (P = 0.07) 0.04166667 0.05813953 0; Chi ² = 0.28,	df=1 (P=0.37 0.01824156 0.02523364 df=1 (P=0.60	120 86 206	5 5	1.7%	0.0581 [0.0087, 0.1076]	•
Petros 2011 Biddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = V.3.7 Pediatric Surgery Akgur 1991 Becmeur 1998 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z =	0.00285987 0; Chi ² = 0.79, 1.80 (P = 0.07) 0.04166667 0.05813953 0; Chi ² = 0.28,	df=1 (P=0.37 0.01824156 0.02523364 df=1 (P=0.60); ² = 0% 120 86 206); ² = 0%	5 5 10	1.7% 4.1%	0.0581 [0.0087, 0.1076] 0.0473 [0.0183, 0.0763]	•
Petros 2011 Biddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = V.3.7 Pediatric Surgery Akgur 1991 Becmeur 1998 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = Votal (95% CI)	0.00285987 0; Chi ² = 0.79, 1.80 (P = 0.07) 0.04166667 0.05813953 0; Chi ² = 0.28, 3.20 (P = 0.001	df = 1 (P = 0.37 0.01824156 0.02523364 df = 1 (P = 0.60); ² = 0% 120 86 206); ² = 0%	5 5 10	1.7%	0.0581 [0.0087, 0.1076] 0.0473 [0.0183, 0.0763]	<u>-</u>
Petros 2011 Siddiqui 2010 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z = 2.3.7 Pediatric Surgery Skgur 1991 Becmeur 1998 Subtotal (95% CI) Heterogeneity: Tau² = 0.0 Fest for overall effect: Z =	0.00285987 0; Chi ² = 0.79, 1.80 (P = 0.07) 0.04166667 0.05813953 0; Chi ² = 0.28, 3.20 (P = 0.001	df = 1 (P = 0.37 0.01824156 0.02523364 df = 1 (P = 0.60 1) 0, df = 38 (P < 0); ² = 0% 120 86 206); ² = 0%	5 5 10	1.7% 4.1%	0.0581 [0.0087, 0.1076] 0.0473 [0.0183, 0.0763]	-0.2 -0.1 0 0.1 0

7.4.1. Forest plot of the incidence of enterotomy, stratified by surgical technique 3 studies excluded. Surgical technique not specified in 3 studies.

			operations E	nterotomy		Incidence	Incidence
tudy or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
4.1 Laparotomy							
urcos 2002	0.00442478	0.00312186	452	2	6.1%	0.0044 [-0.0017, 0.0105]	+
hopra 2003	0.19230769		52	10	0.5%	0.1923 [0.0852, 0.2994]	
inan 1997	0.07407407	0.05040102	27	2		0.0741 [-0.0247, 0.1729]	+
ohanet 1999	0.02898551		276	8		0.0290 [0.0092, 0.0488]	- - -
(awamura 2009		0.02738926	36	1		0.0278 [-0.0259, 0.0815]	+
(eck 1994		0.05184593	50	8	0.5%	0.1600 [0.0584, 0.2616]	
en Broek 2012		0.01426741	464	49	3.4%	0.1056 [0.0776, 0.1336]	-
an Der Krabben 2000	0.19259259		270	52		0.1926 [0.1456, 0.2396]	
ubtotal (95% CI)			1627	132	18.7%		•
leterogeneity: Tau² = 0		, ,	0001); I² = 95%	5			
est for overall effect: Z	= 3.73 (P = 0.00)	02)					
.4.2 Laparoscopy							
accari 2009	0.025	0.0110397	200	5	4.2%	0.0250 [0.0034, 0.0466]	-
aghai 2009	0.2	0.12649111	10	2	0.1%	0.2000 [-0.0479, 0.4479]	+
ecmeur 1998	0.05813953	0.02523364	86	5	1.7%	0.0581 [0.0087, 0.1076]	
len-Haim 2002	0.06	0.02374868	100	6	1.9%	0.0600 [0.0135, 0.1065]	
Porzellino 2004	0.04615385	0.02602474	65	3	1.6%	0.0462 [-0.0049, 0.0972]	
Rouasker 2010	0.01287554	0.00738568	233	3		0.0129 [-0.0016, 0.0274]	 -
Roukerrou 2001		0.06051536	16	1		0.0625 [-0.0561, 0.1811]	-
hopra 2003		0.04252258	23	1		0.0435 [-0.0399, 0.1268]	
rcan 2009		0.00208585	677	2		0.0030 [-0.0011, 0.0070]	•
errari 2008		0.00994987	100	1		0.0100 [-0.0095, 0.0295]	 -
rancois 1994	0.09615385	0.0408817	52	5	0.8%	0.0962 [0.0160, 0.1763]	
reys 1994		0.00586795	240	2		0.0083 [-0.0032, 0.0198]	-
uchs 1992		0.00586503	170	1		0.0059 [-0.0056, 0.0174]	+
lusain 2001		0.01143095	150	3		0.0200 [-0.0024, 0.0424]	
(irshtein 2002		0.01359627	103	2		0.0194 [-0.0072, 0.0461]	
(olmorgen 1998		0.00252842	789	4	6.2%	0.0051 [0.0001, 0.0100]	
(umakiri 2010	0.11400651	0.0181389	307	35	2.6%	0.1140 [0.0785, 0.1496]	
(yzer 1999		0.02617498	53	2		0.0377 [-0.0136, 0.0890]	
.eBlanc 2003		0.00703562	200	2		0.0100 [-0.0038, 0.0238]	_
laguib 2012		0.02048913	68	2		0.0294 [-0.0107, 0.0696]	
-			14	2			
Oliveira 1997 Parant 1995		0.09352195		3		0.1429 [-0.0404, 0.3262]	
arent 1995		0.05310032	31 121	3 4		0.0968 [-0.0073, 0.2008]	
errone 2005		0.01625342 0.02736402	121		3.0%	0.0331 [0.0012, 0.0649]	
etersen 2009			71 41	4	1.5%	0.0563 [0.0027, 0.1100]	
'etros 2011	0.02439024		41	1		0.0244 [-0.0228, 0.0716]	
Sato 2001	0.05882353		17	1		0.0588 [-0.0530, 0.1707]	
hayani 2002	0.15	0.0798436	20	3		0.1500 [-0.0065, 0.3065]	
Siddiqui 2010		0.00164878	1049	3		0.0029 [-0.0004, 0.0061]	
en Broek 2012		0.02596722	38	1		0.0263 [-0.0246, 0.0772]	
arnell 2008 i ubtotal (95% CI)	0.0212766	0.02104903	47 5091	1 110		0.0213 [-0.0200, 0.0625] 0.0178 [0.0116, 0.0239]	•
leterogeneity: Tau² = 0	.00; Chi² = 88.75	i, df = 29 (P < 0.00				•	
est for overall effect: Z	•			-			
otal (95% CI)			6718	242	100.0%	0.0298 [0.0223, 0.0374]	•
	00: 06:2 - 005 6	0 df = 27 /D = 0 (,_,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
eterogeneity: Tau ² = 0							-0.2 -0.1 0 0.1 0.

7.4.2. Forest plot for the incidence of enterotomy compared between laparoscopy and laparotomy

	Laparos	сору	Laparot	omy		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Chopra 2003	1	23	10	52	47.3%	0.19 [0.02, 1.59]	
Ten Broek 2012	1	38	49	464	52.7%	0.23 [0.03, 1.71]	
Total (95% CI)		61		516	100.0%	0.21 [0.05, 0.90]	
Total events	2		59				
Heterogeneity: Tau² =	: 0.00; Chi²	= 0.01,	df = 1 (P :	= 0.90);		0.01 0.1 1 10 100	
Test for overall effect:	Z = 2.10 (F	P = 0.04)				Favours Laparoscopy Favours Laparotomy

7.5.1. Sensitivity analysis of the incidence of enterotomy, impact of individual studies

Study	o.1. Sensitivity analysis of the incidence of enterotomy, impact of individual studies Point estimate 95%CI					
All studies included	0.0328	0.0252-0.0404				
Akgur 1991	0.0325	0.0248-0.0402				
Alwan 1999	0.0324	0.0247-0.0401				
Baccari 2009	0.0331	0.0254-0.0409				
Baghai 2009	0.0326	0.0250-0.0402				
Becmeur 1998	0.0323	0.0246-0.0399				
Ben-Haim 2002	0.0322	0.0246-0.0398				
Borzellino 2004	0.0325	0.0249-0.0402				
Bouasker 2010	0.0339	0.0261-0.0418				
Boukerrou 2001	0.0327	0.0251-0.0403				
Burcos 2002	0.0353	0.0272-0.0435				
Chopra 2003	0.0316	0.0241-0.0391				
Ercan 2009	0.0364	0.0278-0.0450				
Ferrari 2008	0.0339	0.0261-0.0417				
Fevang 2004	0.0308	0.0233-0.0383				
Finan 1997	0.0325	0.0249-0.0401				
François 1994	0.0322	0.0246-0.0397				
Freys 1994	0.0343	0.0264-0.0422				
Fuchs 1992	0.0345	0.0266-0.0424				
Husain 2001	0.0333	0.0256-0.0411				
Johanet 1999	0.0329	0.0252-0.0407				
Kawamura 2009	0.0329	0.0252-0.0405				
Keck 1994	0.0319	0.0244-0.0394				
Kirshtein 2002	0.0333	0.0255-0.0410				
Kolmorgen 1998	0.0358	0.0274-0.0442				
Kumakiri 2010	0.0297	0.0224-0.0370				
Kyzer 1999	0.0327	0.0250-0.0403				
LeBlanc 2003	0.0341	0.0263-0.0420				
Naguib 2012	0.0329	0.0252-0.0405				
Oliveira 1997	0.0326	0.0250-0.0401				
Parent 1995	0.0324	0.0248-0.0400				
Perrone 2005	0.0328	0.0251-0.0404				
Petersen 2009	0.0324	0.0247-0.0400				
Petros 2011	0.0330	0.0253-0.0406				
Sato 2001	0.0327	0.0251-0.0403				
Shayani 2002	0.0324	0.0249-0.0400				
Siddiqui 2010	0.0369	0.0281-0.0457				
Ten Broek 2012	0.0289*	0.0218-0.0361				
Van Der Krabben 2000	0.0281*	0.0212-0.0351				
Varnell 2008	0.0331	0.0254-0.0407				

^{*&}gt;10% impact on point esitmate

7.6.1. Sensitivity analysis of the incidence of enterotomy, stratified by quality of study

		- 1	Reoperations	Enterotomy		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
7.6.1 Intermediate quality	y						
Alwan 1999	0.03952569	0.01224961	253	10	3.6%	0.0395 [0.0155, 0.0635]	-
Baghai 2009	0.2	0.12649111	10	2	0.1%	0.2000 [-0.0479, 0.4479]	+ -
Becmeur 1998	0.05813953	0.02523364	86	5	1.7%	0.0581 [0.0087, 0.1076]	
Borzellino 2004	0.04615385	0.02602474	65	3	1.6%	0.0462 [-0.0049, 0.0972]	 -
Ferrari 2008	0.01	0.00994987	100	1	4.0%	0.0100 [-0.0095, 0.0295]	+
Finan 1997	0.07407407	0.05040102	27	2	0.5%	0.0741 [-0.0247, 0.1729]	+
Husain 2001	0.02	0.01143095	150	3	3.7%	0.0200 [-0.0024, 0.0424]	 -
Johanet 1999	0.02898551	0.01009831	276	8	4.0%	0.0290 [0.0092, 0.0488]	-
Kirshtein 2002	0.01941748	0.01359627	103	2	3.3%	0.0194 [-0.0072, 0.0461]	 -
Parent 1995	0.09677419	0.05310032	31	3		0.0968 [-0.0073, 0.2008]	
Petersen 2009		0.02736402	71		1.5%	0.0563 [0.0027, 0.1100]	
Petros 2011		0.02409097	41			0.0244 [-0.0228, 0.0716]	+-
Sato 2001	0.05882353		17			0.0588 [-0.0530, 0.1707]	
Shayani 2002	0.15	0.0798436	20			0.1500 [-0.0065, 0.3065]	
Siddiqui 2010		0.00164878	1049			0.0029 [-0.0004, 0.0061]	
Varnell 2008		0.02104903	47			0.0213 [-0.0200, 0.0625]	
Subtotal (95% CI)	0.0212100	0.02104000	2346			0.0280 [0.0148, 0.0411]	♦
Heterogeneity: Tau² = 0.0	0: Chi² = 4 1 28	df = 15 (P = 0)					l'
Test for overall effect: Z=			.0003),1 = 04	,,,			
restror overall effect. Z=	4.11 (1 - 0.00	017					
7.6.2 High quality							
Akgur 1991	0.04166667	0.01824156	120	5	2.5%	0.0417 [0.0059, 0.0774]	
Baccari 2009	0.025	0.0110397	200		3.8%	0.0250 [0.0034, 0.0466]	-
Ben-Haim 2002		0.02374868	100		1.8%	0.0600 [0.0135, 0.1065]	
Bouasker 2010		0.00738568	233			0.0129 [-0.0016, 0.0274]	•
Boukerrou 2001		0.06051536	16			0.0625 [-0.0561, 0.1811]	
Burcos 2002		0.00312186	452			0.0044 [-0.0017, 0.0105]	
Chopra 2003		0.04085022	75		0.8%	0.1467 [0.0666, 0.2267]	
Ercan 2009		0.00208585	677			0.0030 [-0.0011, 0.0070]	
Fevang 2004		0.01003933	563		4.0%	0.0604 [0.0407, 0.0801]	-
Francois 1994	0.09615385	0.0408817	52		0.8%	0.0962 [0.0160, 0.1763]	
Freys 1994		0.00586795	240			0.0083 [-0.0032, 0.0198]	<u> </u>
Fuchs 1992		0.00586503	170			0.0059 [-0.0056, 0.0174]	_
Kawamura 2009		0.00388303	36				
Kawamura 2009 Keck 1994					0.5%	0.0278 [-0.0259, 0.0815]	<u> </u>
		0.05184593	50			0.1600 [0.0584, 0.2616]	
Kolmorgen 1998 Kumakiri 2010		0.00252842	789		5.4%	0.0051 [0.0001, 0.0100]	
Kumakiri 2010	0.11400651	0.0181389	307		2.5%	0.1140 [0.0785, 0.1496]	<u>_</u>
Kyzer 1999		0.02617498	53			0.0377 [-0.0136, 0.0890]	L'
LeBlanc 2003		0.00703562	200			0.0100 [-0.0038, 0.0238]	
Naguib 2012		0.02048913	68			0.0294 [-0.0107, 0.0696]	
Oliveira 1997		0.09352195	14			0.1429 [-0.0404, 0.3262]	
Perrone 2005		0.01625342	121		2.8%	0.0331 [0.0012, 0.0649]	
Ten Broek 2012	0.09960159		502		3.3%	0.0996 [0.0734, 0.1258]	+
Van Der Krabben 2000 Subtotal (95% CI)	0.19259259	0.02399851	270 5308			0.1926 [0.1456, 0.2396] 0.0387 [0.0278, 0.0495]	•
Heterogeneity: Tau² = 0.0 Test for overall effect: Z =	•		0.00001); I ^z = !	90%			
Total (95% CI)			7654	291	100.0%	0.0328 [0.0252, 0.0404]	
Heterogeneity: Tau ² = 0.0	0: Chi ² = 263 4	0. df = 38 (P <	0.00001): I ² = 3	36%		•	
Test for overall effect: Z = Test for subgroup differer	8.46 (P < 0.00)	001)					-0.2 -0.1 0 0.1 0.2 Incidence

7.6.2. Table of sensitivity analysis of the incidence of enterotomy, impact of quality of studies

Study	Point estimate	95%CI
All available studies	0.0328	0.0252-0.0404
Low Quality studies only	NA	NA
Intermediate Quality studies only	0.0280	0.0148-0.0411
High studies only	0.0387	0.0278-0.0495

7.7.1. Sensitivity analysis of the incidence of enterotomy, stratified by study design **Incidence**

Study or Subgroup	Incidence	SE	Weight	Incidence IV, Random, 95% CI	Incidence IV, Random, 95% CI
7.7.1 Retrospective					
Akgur 1991	0.04166667	0.01824156	2.5%	0.0417 [0.0059, 0.0774]	
Alwan 1999	0.03952569		3.6%	0.0395 [0.0155, 0.0635]	
Baccari 2009	0.025	0.0110397	3.8%	0.0250 [0.0034, 0.0466]	-
Becmeur 1998		0.02523364	1.7%	0.0581 [0.0087, 0.1076]	
Ben-Haim 2002		0.02374868	1.8%	0.0600 [0.0135, 0.1065]	
Borzellino 2004		0.02602474	1.6%	0.0462 [-0.0049, 0.0972]	
Bouasker 2010		0.00738568	4.6%	0.0129 [-0.0016, 0.0274]	-
Boukerrou 2001		0.06051536	0.4%	0.0625 [-0.0561, 0.1811]	
Burcos 2002		0.00312186	5.3%	0.0044 [-0.0017, 0.0105]	
Chopra 2003	0.14666667	0.04085022	0.8%	0.1467 [0.0666, 0.2267]	
Ferrari 2008		0.00994987	4.0%	0.0100 [-0.0095, 0.0295]	 -
Fevang 2004		0.01003933	4.0%	0.0604 [0.0407, 0.0801]	-
Finan 1997		0.05040102	0.5%	0.0741 [-0.0247, 0.1729]	
Francois 1994	0.09615385	0.0408817	0.8%	0.0962 [0.0160, 0.1763]	
Fuchs 1992	0.00588235	0.00586503	4.9%	0.0059 [-0.0056, 0.0174]	+
Husain 2001		0.01143095	3.7%		 -
Johanet 1999		0.01009831	4.0%	0.0290 [0.0092, 0.0488]	-
Kawamura 2009		0.02738926	1.5%		+
Keck 1994		0.05184593	0.5%	0.1600 [0.0584, 0.2616]	
Kirshtein 2002		0.01359627	3.3%		 -
Kolmorgen 1998		0.00252842	5.4%	0.0051 [0.0001, 0.0100]	
Kumakiri 2010	0.11400651	0.0181389	2.5%	0.1140 [0.0785, 0.1496]	
Kyzer 1999	0.03773585		1.6%	0.0377 [-0.0136, 0.0890]	
LeBlanc 2003	0.01		4.7%		 -
Oliveira 1997		0.09352195	0.2%		
Parent 1995		0.05310032	0.5%		
Perrone 2005		0.01625342	2.8%	0.0331 [0.0012, 0.0649]	
Sato 2001		0.05706721	0.4%		
Shayani 2002	0.15	0.0798436	0.2%		-
Van Der Krabben 2000		0.02399851	1.8%	0.1926 [0.1456, 0.2396]	
Varnell 2008		0.02104903	2.1%	0.0213 [-0.0200, 0.0625]	+-
Subtotal (95% CI)	0.02.12.00	0.02.0.000		0.0393 [0.0287, 0.0499]	♦
Heterogeneity: Tau² = 0.0 Fest for overall effect: Z =	•		0.00001)); I² = 84%	
7.7.3 Prospective	,	ŕ			
Baghai 2009	0.2	0.12649111	0.1%	0.2000 [-0.0479, 0.4479]	+
Ercan 2009		0.00208585	5.4%		+
Freys 1994		0.00586795	4.9%		+
Naguib 2012		0.02048913	2.2%		
Petersen 2009		0.02736402	1.5%	0.0563 [0.0027, 0.1100]	
Petros 2011		0.02409097	1.8%		+
Biddiqui 2010		0.00164878	5.5%		+
Ten Broek 2012		0.01336591	3.3%	0.0996 [0.0734, 0.1258]	-
Subtotal (95% CI) Heterogeneity: Tau ² = 0.0			24.6%	0.0215 [0.0091, 0.0339]	•
Heterogeneity: Tau== 0.0 Test for overall effect: Z=	•		50001), F	- 0070	
Total (95% CI)				0.0328 [0.0252, 0.0404]	•
Heterogeneity: Tau² = 0.0	00; Chi² = 263.4	0, df = 38 (P <	0.00001)); I² = 86%	-0.2 -0.1 0 0.1 0.2
Fest for overall effect: Z= Fest for subgroup differe	8.46 (P < 0.00	001)			-0.2 -0.1 0 0.1 0.2 Incidence

7.7.2. Table of sensitivity analysis of the incidence of enterotomy, impact of study design

Test for subgroup differences: $Chi^2 = 4.56$, df = 1 (P = 0.03), $I^2 = 78.1\%$

Study	Point estimate	95%CI
All available studies	0.0328	0.0252-0.0404
Retrospective studies only	0.0393	0.0287-0.0499
Prospective studies only	0.0215	0.0091-0.0339

7.8.1. Sensitivity analysis of the incidence of enterotomy, stratified by publication date

				Incidence	Incidence
Study or Subgroup	Incidence	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
7.8.1 Published before the	he year 2000				
Akgur 1991	0.04166667	0.01824156	2.5%	0.0417 [0.0059, 0.0774]	-
Alwan 1999	0.03952569	0.01224961	3.6%	0.0395 [0.0155, 0.0635]	-
Becmeur 1998	0.05813953	0.02523364	1.7%	0.0581 [0.0087, 0.1076]	
Finan 1997	0.07407407	0.05040102	0.5%	0.0741 [-0.0247, 0.1729]	+
Francois 1994	0.09615385	0.0408817	0.8%	0.0962 [0.0160, 0.1763]	
Freys 1994	0.00833333	0.00586795	4.9%	0.0083 [-0.0032, 0.0198]	 -
Fuchs 1992	0.00588235	0.00586503	4.9%	0.0059 [-0.0056, 0.0174]	+
Johanet 1999	0.02898551	0.01009831	4.0%	0.0290 [0.0092, 0.0488]	-
Keck 1994	0.16	0.05184593	0.5%	0.1600 [0.0584, 0.2616]	_
Kolmorgen 1998	0.00506971	0.00252842	5.4%	0.0051 [0.0001, 0.0100]	•
Kyzer 1999	0.03773585	0.02617498	1.6%	0.0377 [-0.0136, 0.0890]	
Oliveira 1997	0.14285714	0.09352195	0.2%	0.1429 [-0.0404, 0.3262]	+
Parent 1995	0.09677419	0.05310032	0.5%	0.0968 [-0.0073, 0.2008]	
Subtotal (95% CI)			30.9%	0.0269 [0.0142, 0.0396]	♦
Heterogeneity: Tau ² = 0.0	00; Chi ² = 40.50	i, df = 12 (P < i	0.0001); P	²= 70%	
Test for overall effect: Z=	4.15 (P < 0.00	01)			
7.8.2 Published in the ye	ar 2000 and la	ter			
Baccari 2009	0.025	0.0110397	3.8%	0.0250 [0.0034, 0.0466]	 - -
Baghai 2009		0.12649111	0.1%	0.2000 [-0.0479, 0.4479]	
Ben-Haim 2002		0.02374868	1.8%	0.0600 [0.0135, 0.1065]	
Borzellino 2004		0.02602474	1.6%	0.0462 [-0.0049, 0.0972]	
Bouasker 2010		0.00738568	4.6%	0.0129 [-0.0016, 0.0274]	<u>+</u>
Boukerrou 2001		0.06051536	0.4%	0.0625 [-0.0561, 0.1811]	
Burcos 2002		0.00312186	5.3%	0.0044 [-0.0017, 0.0105]	
Chopra 2003		0.04085022	0.8%	0.1467 [0.0666, 0.2267]	
Ercan 2009	0.00295421	0.00208585	5.4%	0.0030 [-0.0011, 0.0070]	
Ferrari 2008	0.00233421	0.00200303	4.0%	0.0100 [-0.0095, 0.0295]	•
Fevang 2004		0.01003933	4.0%	0.0604 [0.0407, 0.0801]	-
Husain 2001		0.01003335	3.7%	0.0200 [-0.0024, 0.0424]	-
Kawamura 2009		0.02738926	1.5%	0.0278 [-0.0259, 0.0815]	
Kirshtein 2002		0.02750820		0.0194 [-0.0072, 0.0461]	<u>.</u>
Kumakiri 2010	0.11400651	0.0181389	2.5%	0.1140 [0.0785, 0.1496]	
LeBlanc 2003	0.01			0.0100 [-0.0038, 0.0238]	-
Naguib 2012		0.02048913		0.0294 [-0.0107, 0.0696]	
Perrone 2005		0.02046313		0.0331 [0.0012, 0.0649]	
Petersen 2009		0.01025342	1.5%	0.0563 [0.0027, 0.1100]	
Petros 2011		0.02730402		0.0244 [-0.0228, 0.0716]	
Sato 2001		0.02409097		0.0588 [-0.0530, 0.1707]	
Shayani 2002	0.03002333	0.03700721		0.1500 [-0.0065, 0.3065]	
Siddiqui 2010				0.0029 [-0.0004, 0.0061]	
•		0.00164878			
Ten Broek 2012		0.01336591	3.3%	0.0996 [0.0734, 0.1258]	
Van Der Krabben 2000		0.02399851	1.8%	0.1926 [0.1456, 0.2396]	
Varnell 2008 Subtotal (95% CI)	0.0212766	0.02104903		0.0213 [-0.0200, 0.0625] 0.0364 [0.0264, 0.0463]	\
	10· Chiz = 222.0	12 df = 25 /D =			,
Heterogeneity: Tau ² = 0.0 Test for overall effect: Z =	•		0.00001),I — 0870	
Total (95% CI)			100.0%	0.0328 [0.0252, 0.0404]	
	10: Obiz = 200 4	0 df= 20 fP			
Heterogeneity: Tau ² = 0.0	•		0.00001	אָרטא = דו, וּ	-0.2 -0.1 0 0.1 0.2
Test for overall effect: Z =	•	•	0.00	24.000	Incidence
Test for subgroup differe	nces: Chi*= 1.3	32. at = 1 (P =	u.25), l*=	24.0%	

7.8.2. Table of sensitivity analysis of the incidence of enterotomy, impact of publication date

Study	Point estimate	95%CI
All available studies	0.0328	0.0252-0.0404
Studies published before the year 2000	0.0269	0.0142-0.0396
Studies published in the year 2000 and later	0.0364	0.0264-0.0463

8.1.1. Table of quantitative analysis of operative time

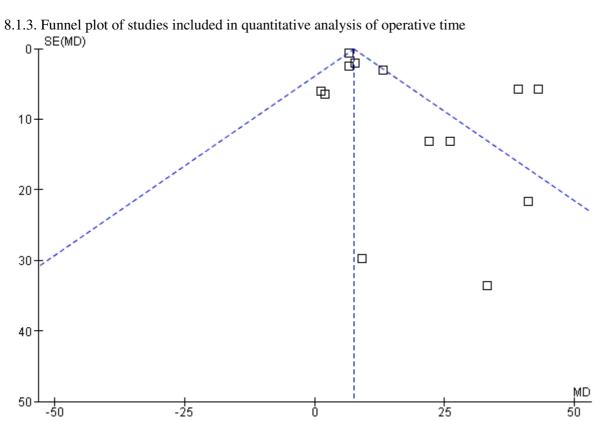
13 studies included in meta-analysis 27 in qualitative analysis qualitative analysis

Study	General informtion		Virging	abdomen	Reoperation	
	Virgo	Operation	N	time (mean ± SD)	N	time (mean ± SD)
Aminsharifi 2011	virgo	urology	50	62.3 (45-190)†	29	98.6 (55-190)†
Boone 2012	virgo	Colorectal	12	94	18	114
Coleman 2000	Virgo	General surgery	53	5 (3-10)*	67	8 (4-39)*
Hamel 2000	virgo	Colorectal	49	148 (70-270)†	36	151 (90-260)†
Inoue 2005	barrier	General surgery	10	41.3±18.5	7	82.4±54.9
Karayiannakis 2004	virgo	Cholecystectomy	1165	47.4±25.6	211	55.1±28
Kawamura 2009	barrier	Lower GI	18	106.9	18	120.6
Komori 1997	virgo	Aorta surgery	75	219±35	10	258.1±13
Kössi 2009	barrier	Colorectal	9	98.9±43.3	8	132.1±85.3
Kurian 2010	virgo	Abdominal wall	100	71.0±30.1	121	113.9±54.4
Kusunoki 2005	barrier	Colorectal	30	95 (65-140)*	29	105 (65-175)†
Kwok 2004	Virgo	Colorectal	65	123 (95-135)*	26	115 (70-185)*
Morales 2007	Virgo	Caesarean section	265	10.7±6	277	17.2±8.4
Naguib 2012	Virgo	Colorectal	113	217 (60-520)	68	233 (114-544)*
Nazemi 2006	Virgo	Urology	21	447 (196-828)*	28	528 (153-922)*
Nozaki 2008	Virgo	Colorectal	100	155 (80-337)*	21	175 (75-330)*
Oliveira 1997	Virgo	Lower GI	18	55	14	117
Parsons 2002	Virgo	Urology	366	235±85	105	257±126
Pohl 2008	Virgo	Urology	57	116	33	114
Seki 2007	Virgo	Colorectal	43	181	14	197
Siddiqui 2010	Virgo	Urology	3950	155±60	243	168±46
Tang 2003	barrier	Lower GI	36	20 (10-65)*	34	20 (10-40)*
Tjandra 2008	barrier	Lower GI	19	35.4±9.7	21	41.9±5.6
Unger 2000	Virgo	Cholecystectomy	28	71±21	29	73±27
Vignali 2007	Virgo	Colorectal	91	192±74	91	218±100
Yu 1994	Virgo	Cholecystectomy	138	78.8±35.7	55	79.9±38
Yuh 2009	virgo	Urology	36	373±111	37	382±141

^{*} median (range) † mean (range)

8.1.2. Forest plot of operative time

1	Reo	peratio	n	Virgir	n abdon	nen		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.7%	41.10 [-1.16, 83.36]	-
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	13.3%	7.70 [3.65, 11.75]	
Komori 1997	258.1	13	10	219	35	75	9.3%	39.10 [27.80, 50.40]	_
Kurian 2010	132.1	85.3	8	98.9	43.3	9	0.8%	33.20 [-32.33, 98.73]	
Kössi 2009	113.94	54.43	121	70.96	30.14	100	9.3%	42.98 [31.62, 54.34]	
Morales 2007	17.2	8.4	277	10.7	6	265	14.1%	6.50 [5.28, 7.72]	•
Parsons 2002	257	126	105	235	85	366	3.8%	22.00 [-3.63, 47.63]	+
Siddiqui 2010	168	46	243	155	60	3950	12.3%	13.00 [6.92, 19.08]	_ -
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	12.9%	6.50 [1.53, 11.47]	
Unger 2000	73	27	29	71	21	28	8.6%	2.00 [-10.53, 14.53]	
Vignali 2007	218	100	91	192	74	91	3.9%	26.00 [0.44, 51.56]	-
Yu 1994	79.9	38	55	78.8	35.7	138	9.1%	1.10 [-10.58, 12.78]	
Yuh 2009	382	141	37	373	111	36	1.0%	9.00 [-49.13, 67.13]	
Total (95% CI)			1215			6252	100.0%	15.17 [9.28, 21.06]	•
Heterogeneity: Tau ² =	63.69; Ch	ni z = 81.9	57, df=	12 (P <	0.0000	1);	85%		-50 -25 0 25 50
Test for overall effect:	Z= 5.05 (P < 0.00	0001)	Ì					-50 -25 0 25 50 Favours reoperation Favours virgin abdome



8.2.1. Forest plot of operative time, stratified by anatomical location

	Reo	peration	1	Virgir	abdon	nen		Mean Difference	Mean Difference
Study or Subgroup	Mean	•		Mean			Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.2.1 Lower GI Surger	у								
Komori 1997	258.1	13	10	219	35	75	9.3%	39.10 [27.80, 50.40]	-
Kössi 2009	113.94	54.43	121	70.96	30.14	100	9.3%	42.98 [31.62, 54.34]	
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	12.9%	6.50 [1.53, 11.47]	-
Vignali 2007 Subtotal (95% CI)	218	100	91 243	192	74	91 285	3.9% 35.3 %	26.00 [0.44, 51.56] 28.47 [5.92, 51.02]	•
Heterogeneity: Tau² = Test for overall effect: 2				= 3 (P <	0.0000	1); ²=	94%		
8.2.3 Hepato- Biliary P	ancreati	c Surge	гу						
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	13.3%	7.70 [3.65, 11.75]	-
Unger 2000	73	27	29	71	21	28	8.6%	2.00 [-10.53, 14.53]	
Yu 1994 Subtotal (95% CI)	79.9	38	55 295	78.8	35.7	138 1331	9.1% 31.0 %	1.10 [-10.58, 12.78] 6.56 [2.90, 10.23]	→
Heterogeneity: Tau² =	0.00; Chi	²= 1.65,	df= 2	(P = 0.4)	4); l² = ()%			
Test for overall effect: 2	Z = 3.51 (I	P = 0.00	04)						
8.2.4 Abdominal Wall									
Kurian 2010 Subtotal (95% CI)	132.1	85.3	8 8	98.9	43.3	9 9	0.8% 0.8 %	33.20 [-32.33, 98.73] 33.20 [-32.33, 98.73]	
Heterogeneity: Not app Test for overall effect: 2		P = N 32	١						
restror overall eller.	0.00 (- 0.02	,						
8.2.5 Gynaecological	Surgery								
Morales 2007 Subtotal (95% CI)	17.2	8.4	277 277	10.7	6	265 265	14.1% 14.1 %	6.50 [5.28, 7.72] 6.50 [5.28, 7.72]	
Heterogeneity: Not app									
Test for overall effect: 2	Z= 10.40	(P < 0.0	0001)						
8.2.6 Urological Surge	ery								
Parsons 2002	257	126	105	235	85	366	3.8%	22.00 [-3.63, 47.63]	
Siddiqui 2010	168	46	243	155	60	3950	12.3%	13.00 [6.92, 19.08]	-
Yuh 2009 Subtotal (95% CI)	382	141	37 385	373	111	36 4352	1.0% 17.1 %	9.00 [-49.13, 67.13] 13.43 [7.55, 19.32]	•
Heterogeneity: Tau² =	0.00; Chi²	²= 0.47,	df = 2	(P = 0.7	9); I² = 0				ļ
Test for overall effect: 2	Z = 4.47 (1	P < 0.00	001)						
8.2.7 Paediatric Surge	егу								
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.7%	41.10 [-1.16, 83.36]	
Subtotal (95% CI)			7			10	1.7%	41.10 [-1.16, 83.36]	
Heterogeneity: Not app Test for overall effect: 2		P = 0.06)						
Total (95% CI)			1215			6252	100.0%	15.17 [9.28, 21.06]	_
Heterogeneity: Tau ² =	83 80· CH	j2 – 01 ¢		12 /D ~	0.0000			13.17 [3.20, 21.00]	—
Test for overall effect: 2			•	12 (17 %	5.0000	17.1 -	55 W		-100 -50 0 50 100
Test for subgroup diffe	•			f = 5 (P =	= 0.04)	$ ^2 = 57^{\circ}$	7%		Favours reoperation Favours virgin abdomen
: 221.2. Cabaroap anic	. 2				0.047.				

8.3.1. Forest plot of operative time, stratified by surgical technique 1 studied excluded. Surgical technique not specified in 1 study.

	Reo	peratio	n	Virgin abdomen Mean Difference		Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.3.1 Laparotomy									
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.9%	41.10 [-1.16, 83.36]	
Komori 1997	258.1	13	10	219	35	75	10.2%	39.10 [27.80, 50.40]	
Kössi 2009	113.94	54.43	121	70.96	30.14	100	10.2%	42.98 [31.62, 54.34]	
Morales 2007	17.2	8.4	277	10.7	6	265	15.3%	6.50 [5.28, 7.72]	•
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	14.0%	6.50 [1.53, 11.47]	
Subtotal (95% CI)			436			469	51.6%	23.65 [10.78, 36.52]	
Heterogeneity: Tau ² =	167.89; C	$hi^2 = 72$	2.55, df	= 4 (P <	0.0000	1);	94%		
Test for overall effect: 2	Z = 3.60 (P)	P = 0.00	003)						
8.3.2 Laparoscopy									
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	14.4%	7.70 [3.65, 11.75]	-
Kurian 2010	132.1	85.3	8	98.9	43.3	9	0.9%	33.20 [-32.33, 98.73]	
Parsons 2002	257	126	105	235	85	366	4.3%	22.00 [-3.63, 47.63]	
Siddiqui 2010	168	46	243	155	60	3950	13.4%	13.00 [6.92, 19.08]	
Vignali 2007	218	100	91	192	74	91	4.3%	26.00 [0.44, 51.56]	
Yu 1994	79.9	38	55	78.8	35.7	138	10.0%	1.10 [-10.58, 12.78]	
Yuh 2009	382	141	37	373	111	36	1.1%	9.00 [-49.13, 67.13]	
Subtotal (95% CI)			750			5755	48.4%	9.61 [5.39, 13.83]	•
Heterogeneity: Tau ² =	4.92; Chi ²	r = 7.01	df= 6	(P = 0.3)	2); l² = 1	4%			
Test for overall effect: 2	Z = 4.46 (F	○ < 0.00	001)						
Total (95% CI)			1186			6224	100.0%	16.49 [10.23, 22.75]	•
Heterogeneity: Tau ² = 1	66.39; Ch	i²= 80.	84, df=	11 (P <	0.0000	1); l²=	86%		± ± ± ±
Test for overall effect: 2	Z = 5.16 (F	⊃ < 0.00	0001)						
Test for subgroup diffe	erences: (:hi² = 4.	.13, df=	1 (P=	0.04), I²	= 75.8	%		ravours reoperation - ravours virgin abdomen
Kurian 2010 Parsons 2002 Siddiqui 2010 Vignali 2007 Yu 1994 Yuh 2009 Subtotal (95% CI) Heterogeneity: Tau ² = T otal (95% CI) Heterogeneity: Tau ² = Test for overall effect: 2	132.1 257 168 218 79.9 382 4.92; Chi ² Z = 4.46 (I	85.3 126 46 100 38 141 ?= 7.01, P < 0.00	8 105 243 91 55 37 750 , df = 6 0001) 1186 84, df =	98.9 235 155 192 78.8 373 (P = 0.3	43.3 85 60 74 35.7 111 2); = 1	9 366 3950 91 138 36 5755 4% 6224 (1); ^z =	0.9% 4.3% 13.4% 4.3% 10.0% 1.1% 48.4 % 100.0 %	33.20 [-32.33, 98.73] 22.00 [-3.63, 47.63] 13.00 [6.92, 19.08] 26.00 [0.44, 51.56] 1.10 [-10.58, 12.78] 9.00 [-49.13, 67.13] 9.61 [5.39, 13.83]	-50 -25 0 25 50 Favours reoperation Favours virgin abdomen

8.4.1. Sensitivity analysis of operative time, impact of individual studies

Study	Pont estimate	95%CI
All studies included	15.17	9.28-21.06
Inoue 2005	14.70	8.80-20.60
Karayiannakis 2004	16.94*	9.50-24.38
Komori 1997	12.01*	6.87-17.14
Kurian 2010	15.04	9.11-20.97
Kössi 2009	11.38*	6.61-16.15
Morales 2007	17.43*	9.32-25.54
Parsons 2002	14.90	8.89-20.92
Siddiqui 2010	15.70	9.09-22.31
Tjandra 2008	16.85*	9.87-23.83
Unger 2000	16.49	10.23-22.75
Vignali 2007	14.73*	8.73-20.72
Yu 1994	16.65	10.38-22.93
Yuh 2009	15.25	9.30-21.21

^{* &}gt;10% effect on point estimate

8.5.1. Sensitivity analysis of operative time, stratified by quality of study

	Reo	peratio	n	Virgin abdomen Mean Difference		Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.4.1 Intermediate qu	ality studi	ies							
Komori 1997	258.1	13	10	219	35	75	9.3%	39.10 [27.80, 50.40]	_ -
Kössi 2009	113.94	54.43	121	70.96	30.14	100	9.3%	42.98 [31.62, 54.34]	
Parsons 2002	257	126	105	235	85	366	3.8%	22.00 [-3.63, 47.63]	+
Siddiqui 2010	168	46	243	155	60	3950	12.3%	13.00 [6.92, 19.08]	
Unger 2000	73	27	29	71	21	28	8.6%	2.00 [-10.53, 14.53]	- -
Yu 1994	79.9	38	55	78.8	35.7	138	9.1%	1.10 [-10.58, 12.78]	
Yuh 2009	382	141	37	373	111	36	1.0%	9.00 [-49.13, 67.13]	
Subtotal (95% CI)			600			4693	53.4%	19.44 [5.55, 33.33]	
Heterogeneity: Tau ² =	268.09; C	:hi² = 49	9.08, df	= 6 (P <	0.0000	1); 2=	88%		
Test for overall effect:	Z = 2.74 (F	P = 0.00	16)						
8.4.2 High quality stud	dies								
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.7%	41.10 [-1.16, 83.36]	
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	13.3%	7.70 [3.65, 11.75]	
Kurian 2010	132.1	85.3	8	98.9	43.3	9	0.8%	33.20 [-32.33, 98.73]	
Morales 2007	17.2	8.4	277	10.7	6	265	14.1%	6.50 [5.28, 7.72]	•
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	12.9%	6.50 [1.53, 11.47]	
Vignali 2007	218	100	91	192	74	91	3.9%	26.00 [0.44, 51.56]	· · · · · · · · · · · · · · · · · · ·
Subtotal (95% CI)			615			1559	46.6%	6.91 [5.01, 8.82]	♦
Heterogeneity: Tau ² =	0.98; Chi ²	s = 5.70	df = 5	(P = 0.3)	4); $I^2 = 1$	12%			
Test for overall effect:	Z = 7.12 (F	P < 0.00	0001)						
Total (95% CI)			1215			6252	100.0%	15.17 [9.28, 21.06]	•
Heterogeneity: Tau ² =	63.69; Ch	i²= 81.:	57, df=	12 (P <	0.0000	1); l²=	85%		-50 -25 0 25 50
Test for overall effect:				`					
Test for subgroup diffe	erences: (Chi² = 3.	.07. df=	1 (P=	0.08), I²	= 67.4	%		Favours reoperation Favours virgin abdomen
				-					

8.5.2. Table of sensitivity analysis of operative time, impact of quality of studies

o.s.z. rubic of sensitivity unarysis of oper	o.e.2. Tuble of behind the unary sib of operative time, impact of quanty of studies									
Study	Point estimate	95%CI								
All available studies	15.17	9.28-21.06								
Low Quality studies only	NA	NA								
Intermediate Quality studies only	19.44	5.55-33.33								
High studies only	6.91	5.01-8.82								

8.6.2. Table of sensitivity analysis of operative time, impact of study design

	Reo	peratio	n	Virgir	n abdon	nen		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.5.1 Retrospective									
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	13.3%	7.70 [3.65, 11.75]	
Komori 1997	258.1	13	10	219	35	75	9.3%	39.10 [27.80, 50.40]	_
Kurian 2010	132.1	85.3	8	98.9	43.3	9	0.8%	33.20 [-32.33, 98.73]	
Morales 2007	17.2	8.4	277	10.7	6	265	14.1%	6.50 [5.28, 7.72]	•
Parsons 2002	257	126	105	235	85	366	3.8%	22.00 [-3.63, 47.63]	+
Unger 2000	73	27	29	71	21	28	8.6%	2.00 [-10.53, 14.53]	
Vignali 2007	218	100	91	192	74	91	3.9%	26.00 [0.44, 51.56]	•
Yu 1994	79.9	38	55	78.8	35.7	138	9.1%	1.10 [-10.58, 12.78]	
Yuh 2009	382	141	37	373	111	36	1.0%	9.00 [-49.13, 67.13]	
Subtotal (95% CI)			823			2173	63.8%	12.25 [5.54, 18.95]	•
Heterogeneity: Tau ² =	48.75; Ch	$i^2 = 37$.	39, df=	8 (P < 0	0.00001); $I^2 = 7$	9%		
Test for overall effect:	Z = 3.58 (F	P = 0.00	03)						
8.5.2 Prospective									
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.7%	41.10 [-1.16, 83.36]	
Kössi 2009	113.94	54.43	121	70.96	30.14	100	9.3%	42.98 [31.62, 54.34]	
Siddiqui 2010	168	46	243	155	60	3950	12.3%	13.00 [6.92, 19.08]	_
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	12.9%	6.50 [1.53, 11.47]	
Subtotal (95% CI)			392			4079	36.2%	21.94 [6.48, 37.40]	
Heterogeneity: Tau ² =	190.40; C	hi = 36	5.02, df	= 3 (P <	0.0000	1); I² =	91%		
Test for overall effect:	Z = 2.78 (F	P = 0.00)5)						
Total (95% CI)			1215			6252	100.0%	15.17 [9.28, 21.06]	•
Heterogeneity: Tau ² =	63.69; Ch	i² = 81.	57, df=	12 (P <	0.0000	1);	85%		-50 -25 0 25 50
Test for overall effect: .	Z = 5.05 (F	o.00	0001)						Favours reoperation Favours virgin abdomen
Test for subgroup diffe	erences: (hi²=1	.27. df=	1 (P=	0.26), l²	$= 21.4^{\circ}$	%		r avours reoperation in avours virgin abdollien

8.6.2. Table of sensitivity analysis of operative time, impact of study design

o.o.z. Tuble of sensitivity unarysis of operative time, impact of study design									
Study	Point estimate	95%CI							
All available studies	15.17	9.28-21.06							
Retrospective only	12.25	5.54-18.95							
Prospective only	21.94	9.28-21.06							

8.7.1. Sensitivity analysis of operative time, stratified by publication date

	Reo	peratio	n	Virgir	n abdon	nen		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.6.1 Published before	e the yea	r 2000							
Komori 1997	258.1	13	10	219	35	75	9.3%	39.10 [27.80, 50.40]	
Yu 1994	79.9	38	55	78.8	35.7	138	9.1%	1.10 [-10.58, 12.78]	
Subtotal (95% CI)			65			213	18.4%	20.13 [-17.11, 57.37]	
Heterogeneity: Tau ² =	687.64; C	hi²= 21	.01, df	= 1 (P <	0.0000	1); l² = !	95%		
Test for overall effect: 2	Z = 1.06 (1	P = 0.29))						
8.6.2 Published in the	year 200	0 and la	ater						
Inoue 2005	82.4	54.9	7	41.3	18.5	10	1.7%	41.10 [-1.16, 83.36]	
Karayiannakis 2004	55.1	28	211	47.4	25.6	1165	13.3%	7.70 [3.65, 11.75]	
Kurian 2010	132.1	85.3	8	98.9	43.3	9	0.8%	33.20 [-32.33, 98.73]	
Kössi 2009	113.94	54.43	121	70.96	30.14	100	9.3%	42.98 [31.62, 54.34]	
Morales 2007	17.2	8.4	277	10.7	6	265	14.1%	6.50 [5.28, 7.72]	•
Parsons 2002	257	126	105	235	85	366	3.8%	22.00 [-3.63, 47.63]	-
Siddiqui 2010	168	46	243	155	60	3950	12.3%	13.00 [6.92, 19.08]	
Tjandra 2008	41.9	5.59	21	35.4	9.7	19	12.9%	6.50 [1.53, 11.47]	
Unger 2000	73	27	29	71	21	28	8.6%	2.00 [-10.53, 14.53]	
Vignali 2007	218	100	91	192	74	91	3.9%	26.00 [0.44, 51.56]	
Yuh 2009	382	141	37	373	111	36	1.0%	9.00 [-49.13, 67.13]	
Subtotal (95% CI)			1150			6039	81.6%	13.20 [7.72, 18.69]	•
Heterogeneity: Tau ² =	40.30; Ch	ni = 50.1	12, df=	10 (P <	0.0000	1); $I^2 = I$	80%		
Test for overall effect:	Z = 4.72 (1	P < 0.00	1001)						
Total (95% CI)			1215			6252	100.0%	15.17 [9.28, 21.06]	•
Heterogeneity: Tau² =	63.69; Ch	ni z = 81.5	57, df=	12 (P <	0.0000	1); l² =	85%		-50 -25 0 25 50
Test for overall effect: 2	Z = 5.05 (1	P < 0.00	1001)						Favours reoperation Favours virgin abdomen
Test for subgroup diffe	erences: ($Chi^2 = 0.$	13. df=	= 1 (P =	0.72), I²	= 0%			1 475415 Teoperation 1 475415 Yilgin abdomen

8.7.2. Table of sensitivity analysis of operative time, impact of publication date

Study	Point estimate	95%CI
All available studies	15.17	9.28-21.06
Studies published before the year 2000	20.13	-17.11-57.37
Studies published in the year 2000 and later	13.20	7.72-18369

9.1.1. Table of pregnancy rates

Study	Data collection	N	Respons N	Attempted	Length of	Pregnancies	Reference
				pregnancy	follow-up		population
Counihan 1994	Quastionnaire	203	110	37	12	18	Before surgery
Gorgun 2004	Questionnaire	500	300	135	12	59	Before surgery
Hahnloser 2004	Questionnaire	544	436	436*	158±69	135	Before surgery
Hudson 1997	Questionnaire	460	409	57	24	45	Medical
							treated patients
Johnson 2004	Questionnaire	323	254	66	12	37	Before surgery
Lepisto 2007	Questionnaire	160	138	54	106(13-230)	44	No useful ref.
Mortier 2006	Structured	37	37	15	60	10	Before surgery
	Interview						
Olsen 2002	Structured	343	290	149	60	54	Before surgery
	Interview						
Òresland 1994	Structured	60	60	28	12	6	Before surgery
	Interview						
Wikland 1990	Structured	71	71	27	60	10	Before surgery
	Interview						

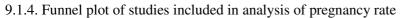
^{*}Fertility for 436 patients before and after surgery number of attempts not adequately described

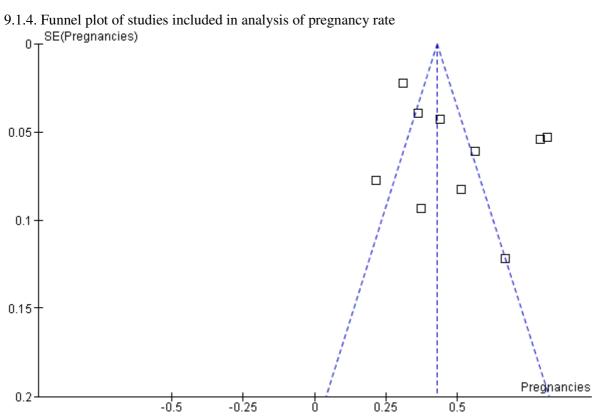
9.1.2. Forest plot of the pregnancy rate, including all studies

			Patients	Pregnancy		Pregnancies	Pregn	ancies
Study or Subgroup	Pregnancies	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Rando	om, 95% CI
Counihan 1994	0.513514	0.082169	37	19	9.5%	0.51 [0.35, 0.67]		-
Gorgun 2004	0.43703704	0.04269059	135	59	10.7%	0.44 [0.35, 0.52]		-
Hahnloser 2004	0.30963303	0.02214218	436	135	11.1%	0.31 [0.27, 0.35]		+
Hudson 1997	0.78947368	0.05399886	57	45	10.4%	0.79 [0.68, 0.90]		-
Johnson 2004	0.56060606	0.06109195	66	37	10.2%	0.56 [0.44, 0.68]		-
Lepisto 2007	0.81481481	0.05286104	54	44	10.4%	0.81 [0.71, 0.92]		-
Mortier 2006	0.66666667	0.12171612	15	10	8.1%	0.67 [0.43, 0.91]		
Olsen 2002	0.36241611	0.03938032	149	54	10.8%	0.36 [0.29, 0.44]		-
Oresland 1994	0.21428571	0.07754431	28	6	9.7%	0.21 [0.06, 0.37]		
Wikland 1990	0.37037037	0.0929349	27	10	9.1%	0.37 [0.19, 0.55]		
Total (95% CI)			1004	419	100.0%	0.50 [0.37, 0.63]		•
Heterogeneity: Tau ² =			o < 0.00001	1); I²= 94%			-0.5-0.25	0 0.25 0.5
Test for overall effect	.∠= 1.03 (P < U.	00001)						Pregnancies

9.1.3. Forest plot of the pregnancy rate compared between operated and not operated patients

	1 0						*	
	Post colorectal s	urgery	Pre colorectal s	urgery		Odds Ratio	Odds Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI	
Counihan 1994	19	37	57	62	11.0%	0.09 [0.03, 0.28]		
Gorgun 2004	59	135	76	127	15.1%	0.52 [0.32, 0.85]		
Hahnloser 2004	135	436	252	436	16.1%	0.33 [0.25, 0.43]		
Hudson 1997	45	57	122	133	12.6%	0.34 [0.14, 0.82]		
Johnson 2004	37	66	91	95	11.0%	0.06 [0.02, 0.17]		
Mortier 2006	10	15	23	24	5.3%	0.09 [0.01, 0.84]		
Olsen 2002	54	149	76	84	13.2%	0.06 [0.03, 0.13]		
Oresland 1994	6	28	32	32	3.7%	0.00 [0.00, 0.08]	←	
Wikland 1990	10	27	39	54	11.9%	0.23 [0.08, 0.60]		
Total (95% CI)		950		1047	100.0%	0.15 [0.08, 0.29]	•	
Total events	375		768					
Heterogeneity: Tau ² =	= 0.63; Chi ² = 43.27,	df=8 (P	< 0.00001); $I^2 = 8$;	2%			t	
Test for overall effect			.,,,				0.01 0.1 1 1 Favours Pre Surgery Favours P	Ö 100 ost Surgery





9.2.1. Forest plot of analysis for the pregnancy rate in studies with adequate description of follow-up for best and worst case scenario analysis.

All studies included. Two studies with no loss to follow-up.

			Patients Pregnancy Pregnancies				Pregna	ncies
Study or Subgroup	Pregnancies	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Randor	n, 95% CI
Counihan 1994	0.513514	0.082169	37	19	9.5%	0.51 [0.35, 0.67]		-
Gorgun 2004	0.43703704	0.04269059	135	59	10.7%	0.44 [0.35, 0.52]		
Hahnloser 2004	0.30963303	0.02214218	436	135	11.1%	0.31 [0.27, 0.35]		•
Hudson 1997	0.78947368	0.05399886	57	45	10.4%	0.79 [0.68, 0.90]		-
Johnson 2004	0.56060606	0.06109195	66	37	10.2%	0.56 [0.44, 0.68]		-
Lepisto 2007	0.81481481	0.05286104	54	44	10.4%	0.81 [0.71, 0.92]		-
Mortier 2006	0.66666667	0.12171612	15	10	8.1%	0.67 [0.43, 0.91]		
Olsen 2002	0.36241611	0.03938032	149	54	10.8%	0.36 [0.29, 0.44]		-
Oresland 1994	0.21428571	0.07754431	28	6	9.7%	0.21 [0.06, 0.37]		
Wikland 1990	0.37037037	0.0929349	27	10	9.1%	0.37 [0.19, 0.55]		-
Total (95% CI)			1004	419	100.0%	0.50 [0.37, 0.63]		•
Heterogeneity: Tau² = Test for overall effect:			< 0.00001); I²= 94%			-0.5-0.25 0	0.25 0.5 Pregnancies

9.2.2. Forest plot of best case analysis for the pregnancy rate

			Patients	Pregnancy		Pregnancies	Pregnancies	
Study or Subgroup	Pregnancies	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Rando	m, 95% CI
Counihan 1994	0.86153846	0.03029216	130	112	10.5%	0.86 [0.80, 0.92]		+
Gorgun 2004	0.77313433	0.02288176	335	259	10.6%	0.77 [0.73, 0.82]		+
Hahnloser 2004	0.44669118	0.02131513	544	243	10.7%	0.45 [0.40, 0.49]		+
Hudson 1997	0.8888889	0.03024061	108	96	10.5%	0.89 [0.83, 0.95]		+
Johnson 2004	0.78518519	0.0353469	135	106	10.5%	0.79 [0.72, 0.85]		+
Lepisto 2007	0.86842105	0.03877498	76	66	10.4%	0.87 [0.79, 0.94]		-
Mortier 2006	0.66666667	0.12171612	15	10	7.9%	0.67 [0.43, 0.91]		
Olsen 2002	0.52970297	0.03511775	202	107	10.5%	0.53 [0.46, 0.60]		+
Oresland 1994	0.21428571	0.07754431	28	6	9.4%	0.21 [0.06, 0.37]		
Wikland 1990	0.37037037	0.0929349	27	10	8.9%	0.37 [0.19, 0.55]		
Total (95% CI)			1600	1015	100.0%	0.65 [0.52, 0.78]		•
Heterogeneity: Tau ² = Test for overall effect	•		< 0.00001	l); l² = 97%			-1 -0.5 (0.5 1 Pregnancies

9.2.3. Forest plot of worst case analysis for the pregnancy rate

			Patients	Pregnancy		Pregnancies	Pregn	ancies
Study or Subgroup	Pregnancies	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Rando	m, 95% CI
Counihan 1994	0.86153846	0.03029216	130	112	10.4%	0.86 [0.80, 0.92]		-
Gorgun 2004	0.14615385	0.03098299	130	19	10.3%	0.15 [0.09, 0.21]		-
Hahnloser 2004	0.1761194	0.02081198	335	59	10.5%	0.18 [0.14, 0.22]		+
Hudson 1997	0.24816176	0.01851954	544	135	10.5%	0.25 [0.21, 0.28]		
Johnson 2004	0.41666667	0.04743959	108	45	10.1%	0.42 [0.32, 0.51]		-
Lepisto 2007	0.27407407	0.03838957	135	37	10.3%	0.27 [0.20, 0.35]		-
Mortier 2006	0.57894737	0.05663448	76	44	9.9%	0.58 [0.47, 0.69]		
Olsen 2002	0.66666667	0.12171612	15	10	8.3%	0.67 [0.43, 0.91]		
Oresland 1994	0.26732673	0.03113871	202	54	10.3%	0.27 [0.21, 0.33]		-
Wikland 1990	0.21428571	0.07754431	28	6	9.5%	0.21 [0.06, 0.37]		
Total (95% CI)			1703	521	100.0%	0.38 [0.23, 0.53]		•
Heterogeneity: Tau² = Test for overall effect:			° < 0.00001	l); l²= 98%			-1 -0.5	0 0.5 Pregnancies

9.3.1. Pregnancy rate, by anatomical location: Not applicable, all studies after Lower- GI surgery

9.4.1. Pregnancy rate, by surgical technique: Not applicable, all studies after laparotomy

9.5.1. Sensitivity analysis of the pregnancy rate, impact of individual studies

Study	Point estimate	95% CI
All studies included	0.50	0.37-0.63
Counihan 1994	0.50	0.36-0.64
Gorgun 2004	0.51	0.36-0.60
Hahnloser 2004	0.53	0.39-0.66
Hudson 1997	0.47	0.35-0.59
Johnson 2004	0.50	0.36-0.64
Lepisto 2007	0.46	0.35-0.58
Mortier 2006	0.49	0.35-0.62
Olsen 2002	0.52	0.37-0.67
Oresland 1994	0.53	0.40-0.67
Wikland 1990	0.52	0.38-0.65

9.6.1. Sensitivity analysis of the pregnancy rate, stratified by quality of study

		Pregnancies	Pregnancies		
Study or Subgroup	Pregnancies	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
9.5.1 Low Quality stu	ıdies				
Counihan 1994	0.513514	0.082169	9.5%	0.51 [0.35, 0.67]	
Gorgun 2004	0.43703704	0.04269059	10.7%	0.44 [0.35, 0.52]	-
Hahnloser 2004	0.30963303	0.02214218	11.1%	0.31 [0.27, 0.35]	•
Hudson 1997	0.78947368	0.05399886	10.4%	0.79 [0.68, 0.90]	-
Johnson 2004	0.56060606	0.06109195	10.2%	0.56 [0.44, 0.68]	-
Lepisto 2007	0.81481481	0.05286104	10.4%	0.81 [0.71, 0.92]	-
Olsen 2002	0.36241611	0.03938032	10.8%	0.36 [0.29, 0.44]	-
Oresland 1994	0.21428571	0.07754431	9.7%	0.21 [0.06, 0.37]	
Subtotal (95% CI)			82.8%	0.50 [0.36, 0.65]	•
Heterogeneity: Tau ² =	= 0.04; Chi² = 14:	3.14, df = 7 (P	< 0.0000	1);	
Test for overall effect:	Z = 6.77 (P < 0.1)	00001)			
9.5.2 Intermediate Q	uality studies				
Mortier 2006	0.66666667	0.12171612	8.1%	0.67 [0.43, 0.91]	
Wikland 1990	0.37037037	0.0929349	9.1%	0.37 [0.19, 0.55]	
Subtotal (95% CI)			17.2%	0.51 [0.22, 0.80]	
Heterogeneity: Tau ² =	= 0.03; Chi ² $= 3.7$	4, df = 1 (P = 0)	0.05); l ^z =	73%	
Test for overall effect:	Z = 3.44 (P = 0.1)	0006)			
Total (95% CI)			100.0%	0.50 [0.37, 0.63]	•
Heterogeneity: Tau ² =	= 0.04; Chi² = 14°	7.37, df = 9 (P	< 0.0000	1); I²= 94%	15 0 25 0 0 25 0 5
Test for overall effect:					-0.5-0.25 0 0.25 0.5 Pregnancies
Test for subgroup dif	ferences: Chi²=	0.00, df = 1 (P)	= 0.96).	² = 0%	i regilalicies

9.6.2. Table of sensitivity analysis of the pregnancy rate, impact of quality of studies

Study	Point estimate	95% CI
All studies included	0.50	0.37-0.63
Low Quality studies only	0.50	0.36-0.65
Intermediate Quality studies only	0.51	0.22-0.80
High Quality studies only	NA	NA

9.7.1. Sensitivity analysis of the pregnancy rate, stratified by study design

				Pregnancies	Pregnancies		
Study or Subgroup	Pregnancies	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI		
9.6.1 Retrospective							
Counihan 1994	0.513514	0.082169	9.5%	0.51 [0.35, 0.67]			
Gorgun 2004	0.43703704	0.04269059	10.7%	0.44 [0.35, 0.52]	-		
Hudson 1997	0.78947368	0.05399886	10.4%	0.79 [0.68, 0.90]	-		
Johnson 2004	0.56060606	0.06109195	10.2%	0.56 [0.44, 0.68]	-		
Lepisto 2007	0.81481481	0.05286104	10.4%	0.81 [0.71, 0.92]	-		
Mortier 2006	0.66666667	0.12171612	8.1%	0.67 [0.43, 0.91]			
Olsen 2002	0.36241611	0.03938032	10.8%	0.36 [0.29, 0.44]	-		
Oresland 1994	0.21428571	0.07754431	9.7%	0.21 [0.06, 0.37]			
Wikland 1990	0.37037037	0.0929349	9.1%	0.37 [0.19, 0.55]			
Subtotal (95% CI)			88.9%	0.53 [0.39, 0.66]	•		
Heterogeneity: Tau ² =	: 0.04; Chi² = 95	.83, df = 8 (P <	0.00001); I² = 92%			
Test for overall effect:	Z = 7.50 (P < 0.	00001)					
9.6.2 Prospective							
Hahnloser 2004	0.30963303	0.02214218	11.1%	0.31 [0.27, 0.35]			
Subtotal (95% CI)			11.1%	0.31 [0.27, 0.35]	♦		
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z=13.98 (P < 0).00001)					
Total (95% CI)			100.0%	0.50 [0.37, 0.63]	•		
Heterogeneity: Tau ² =	0.04; Chi² = 14	7.37, df = 9 (P	< 0.0000	1); I² = 94%			
Test for overall effect:				.,	-0.5-0.25 0 0.25 0.5		
Test for subgroup diff	,	•	9 = 0.003	. I² = 88.4%	Pregnancies		

9.7.2. Table of sensitivity analysis of the pregnancy rate, impact of study design

Study	Point estimate	95% CI
All studies included	0.50	0.37-0.63
Retrospective studies only	0.53	0.39-0.66
Prospective studies only	0.31	0.27-0.35

9.8.1. Sensitivity analysis of the pregnancy rate, stratified by publication date

Pregnancies Pregnancy									
Study or Subgroup	Pregnancies	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI				
9.7.1 Published before	re the year 2000)							
Counihan 1994	0.513514	0.082169	9.5%	0.51 [0.35, 0.67]					
Hudson 1997	0.78947368	0.05399886	10.4%	0.79 [0.68, 0.90]	-				
Oresland 1994	0.21428571	0.07754431	9.7%	0.21 [0.06, 0.37]					
Wikland 1990	0.37037037	0.0929349	9.1%	0.37 [0.19, 0.55]	_ 				
Subtotal (95% CI)			38.8%	0.48 [0.20, 0.75]	•				
Heterogeneity: Tau² =	0.07; Chi² = 42	.34, df = 3 (P <	0.00001);					
Test for overall effect:	Z = 3.39 (P = 0.	0007)							
9.7.2 Published in the	e year 2000 and	later							
Gorgun 2004	0.43703704	0.04269059	10.7%	0.44 [0.35, 0.52]	-				
Hahnloser 2004	0.30963303	0.02214218	11.1%	0.31 [0.27, 0.35]					
Johnson 2004	0.56060606	0.06109195	10.2%	0.56 [0.44, 0.68]	-				
Lepisto 2007	0.81481481	0.05286104	10.4%	0.81 [0.71, 0.92]	-				
Mortier 2006	0.66666667	0.12171612	8.1%	0.67 [0.43, 0.91]					
Olsen 2002	0.36241611	0.03938032	10.8%	0.36 [0.29, 0.44]	-				
Subtotal (95% CI)			61.2%	0.51 [0.36, 0.67]	•				
Heterogeneity: Tau ² =	0.03; Chi ² = 91.	.50, df = 5 (P <	0.00001);					
Test for overall effect:	$Z = 6.60 (P \le 0.$	00001)							
Total (95% CI)			100.0%	0.50 [0.37, 0.63]	•				
Heterogeneity: Tau² =	0.04; Chi² = 14	7.37, df = 9 (P	< 0.0000	1); I² = 94%	-0.5-0.25 0 0.25 0.5				
Test for overall effect:	$Z = 7.63 (P \le 0.$	00001)			-0.5-0.25 0 0.25 0.5 Pregnancies				
Test for subgroup diff	ferences: Chi²=	i regilancies							

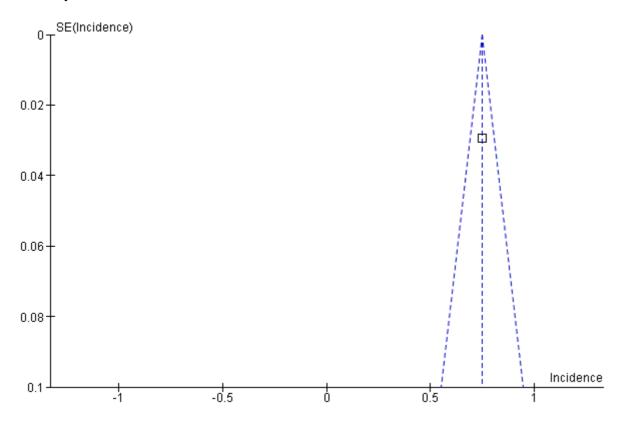
9.8.2. Table of sensitivity analysis of the pregnancy rate, impact of publication date

Study	Point estimate	95% CI
All studies included	0.50	0.37-0.63
Studies published before the year 2000 only	0.48	0.20-0.75
Studies published in the year 2000 and later only	0.51	0.36-0.67

10.1.1. Forest plot of the cross sectional incidence of adhesions in patients with postoperative infertility, including all studies

			Postoperative infertility	Adhesions		Incidence		Inc	idence	
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI		IV, Rand	lom, 95% CI	
Lehmann-Willenbrock 1990	0.74660633	0.0292582	221	165	100.0%	0.75 [0.69, 0.80]				
Total (95% CI)			221	165	100.0%	0.75 [0.69, 0.80]			•	
Heterogeneity: Not applicable Test for overall effect: Z = 25.5.)					-1	-0.5	0 0.5 Incidence	1

10.1.2. 10.1.2. Funnel plot of studies included in analysis of incidence of adhesions in patients with postoperative infertility



- 10.2.1 incidence of adhesions in patients with postoperative infertility, by anatomical location: Not applicable, all studies lower GI surgery (appendectomy)
- 10.3.1. incidence of adhesions in patients with postoperative infertility, by surgical technique Not applicable, surgical technique not specified in 1 study.
- 10.4.1. Sensitivity analysis of the cross-sectional incidence of ASBO, impact of individual sudies Not applicable, only 1 study in analysis
- 10.5.1. Sensitivity analysis of incidence of adhesions in patients with postoperative infertility, impact of quality of study

Not applicable, all studies intermediate quality

- 10.6.1. Sensitivity analysis of incidence of adhesions in patients with postoperative infertility, impact of study design Not applicable, all studies retrospective
- 10.7.1. Sensitivity analysis of incidence of adhesions in patients with postoperative infertility, impact of publication date

Not applicable, all studies published before the year 2000

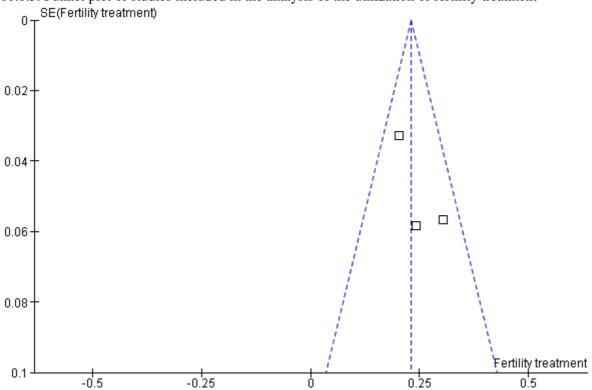
11.1.1. Forest plot of the utilization of fertility treatment, including all studies

			Postoperative patient	Fertility treatment		Fertility treatment	Fertility treatment
Study or Subgroup	Fertility treatment	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Johnson 2004	0.3030303	0.05656894	66	20	23.5%	0.30 [0.19, 0.41]	
Lepisto 2007	0.24074074	0.0581799	54	13	22.4%	0.24 [0.13, 0.35]	_
Olsen 2002	0.20134228	0.03285146	149	30	54.2%	0.20 [0.14, 0.27]	-
Total (95% CI)			269	63	100.0%	0.23 [0.18, 0.29]	•
Heterogeneity: Tau ² =	= 0.00; Chi² = 2.46, df	= 2 (P = 0.29)	; I² = 19%				-0.5 -0.25 0 0.25 0.5
Test for overall effect	: Z = 7.90 (P < 0.0000	1)					Favours experimental Favours control

11.1.2. Forest plot of the utilization of fertility treatment, compared between preoperative and postoperative patients

	Postopei	rative	Preoper	ative		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Johnson 2004	20	66	5	95	73.1%	7.83 [2.76, 22.19]	
Olsen 2002	30	149	0	84	26.9%	43.13 [2.60, 715.22]	
Total (95% CI)		215		179	100.0%	12.39 [2.26, 67.97]	
Total events	50		5				
Heterogeneity: Tau² =	= 0.75; Chi²	= 1.64,	df=1 (P=	0.20);1	²= 39%		0.01 0.1 1 10 100
Test for overall effect:	Z = 2.90 (F	P = 0.00	4)				Favours postoperative Favours preoperative

11.1.3. Funnel plot of studies included in the analysis of the utilization of fertility treatment



- 11.2.1. Utilization of fertility treatment, by anatomical location Not applicable. All studies in Lower GI Surgery
- 11.3.1. Utilization of fertility treatment, by surgical technique Not applicable. All studies in laparotomy.

11.4.1. Sensitivity analysis of the utilization of fertility treatment, impact of individual studies

Study	Point estimate	95% CI
All studies included	0.23	0.18-0.29
Johnson 2004	0.21	0.15-0.27
Lepisto 2007	0.24	0.14-0.34
Olsen 2002	0.27*	0.19-0.35

^{*&}gt; 10% impact on point estimate

11.5.1. Sensitivity analysis of the utilization of fertility treatment, stratified by quality of studies

				Fertility treatment	Fertility to	reatment
Study or Subgroup	Fertility treatment	SE	Weight	IV, Random, 95% CI	IV, Rando	m, 95% CI
11.3.1 Low Quality S	tudies					
Lepisto 2007	0.24074074	0.0581799	22.4%	0.24 [0.13, 0.35]		
Subtotal (95% CI)			22.4%	0.24 [0.13, 0.35]		-
Heterogeneity: Not as	oplicable					
Test for overall effect	Z = 4.14 (P < 0.0001)					
11.3.2 Intermediate	Quality Studies					
Johnson 2004	0.3030303	0.05656894	23.5%	0.30 [0.19, 0.41]		
Olsen 2002	0.20134228	0.03285146	54.2%	0.20 [0.14, 0.27]		-
Subtotal (95% CI)			77.6%	0.24 [0.14, 0.34]		•
Heterogeneity: Tau ² =	= 0.00; Chi² = 2.42, df =	= 1 (P = 0.12);	$I^2 = 59\%$			
Test for overall effect	Z= 4.86 (P < 0.00001	l)				
Total (95% CI)			100.0%	0.23 [0.18, 0.29]		•
Heterogeneity: Tau ² =	= 0.00; Chi² = 2.46, df=	= 2 (P = 0.29);	I ² = 19%			
Test for overall effect:	Z = 7.90 (P < 0.00001) · · · · · · · · · · · · · · · · · · ·		-	-0.5 -0.25 I	0.25 0.5
	ferences: Chi² = 0.00.	•	99). I² = 0°	%	avours experimental	ravours control

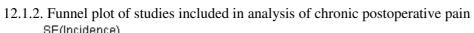
11.5.2. Table of sensitivity analysis of the utilization of fertility treatment, impact of quality of studies

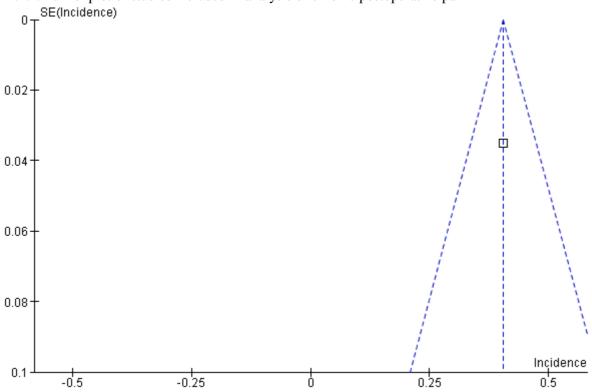
Study	Point estimate	95% CI
All studies included	0.23	0.18-0.29
Low Quality Studies only	0.24	0.13-0.35
Intermediate Quality Studies only	0.24	0.14-0.34
High Quality Studies only	NA	NA

- 11.6.1. Sensitivity analysis of the utilization of fertility treatment, impact of study design Not applicable, all studies retrospective
- 11.7.1. Sensitivity analysis of the utilization of fertility treatment, impact of publication date Not applicable, all studies published after the year 2000

12.1.1. Forest plot of the incidence of chronic postoperative pain, including all studies

			Postoperative	Chronic pain		Incidence		In	ciden	ce	
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI		IV, Ran	idom,	95% CI	
Fevang 2004	0.4040404	0.03487291	198	80	100.0%	0.40 [0.34, 0.47]				-	
Total (95% CI)			198	80	100.0%	0.40 [0.34, 0.47]				•	•
Heterogeneity: Not ap Test for overall effect		< 0.00001)					-0.5	-0.25	- Ir	0.25 ncidence	0.5





12.2.1. Forest plot of best case scenario the incidence of chronic postoperative pain

			Postoperative	Chronic pain		Incidence		In	cidence	
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI		IV, Rar	ndom, 95% Cl	
Fevang 2004	0.16	0.01639512	500	80	100.0%	0.16 [0.13, 0.19]				
Total (95% CI)			500	80	100.0%	0.16 [0.13, 0.19]			•	
Heterogeneity: Not ap Test for overall effect:		< 0.00001)					-0.5	-0.25	0 0.25 Incidence	0.5

12.2.2. Forest plot of worst case scenario the incidence of chronic postoperative pain

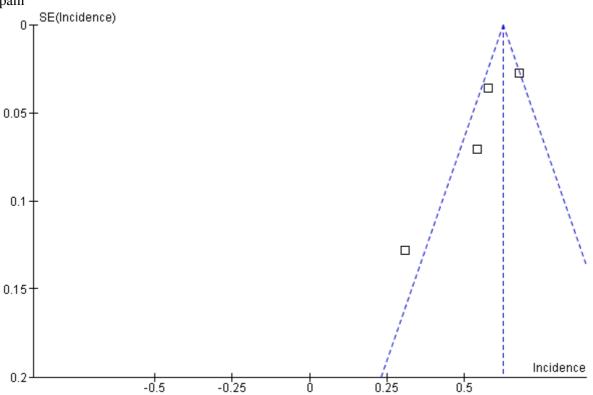
1			Postoperative	Chronic pain	•	Incidence		Inci	dence	
Study or Subgroup	Incidence	SE	Total	l Total	Weight	IV, Random, 95% CI		IV, Rand	om, 95% C	1
Fevang 2004	0.764	0.01898968	500	382	100.0%	0.76 [0.73, 0.80]				
Total (95% CI)			500	382	100.0%	0.76 [0.73, 0.80]				•
Heterogeneity: Not a Test for overall effect		· < 0.00001)					-1	-0.5	0 0.5	

- 12.3.1. incidence of chronic postoperative pain, by anatomical location: Not applicable, all studies lower GI surgery (appendectomy)
- 12.4.1. incidence of chronic postoperative pain, by surgical technique Not applicable, surgical technique not specified in 1 study.
- 12.5.1. Sensitivity analysis of the incidence of chronic postoperative pain, impact of individual studies Not applicable, only 1 study in analysis
- 12.6.1. Sensitivity analysis of the incidence of chronic postoperative pain, impact of quality of study Not applicable, all studies intermediate quality
- 12.7.1. Sensitivity analysis of the incidence of chronic postoperative pain, impact of study design Not applicable, all studies retrospective
- 12.8.1. Sensitivity analysis of the incidence of chronic postoperative pain, impact of publication date Not applicable, all studies published after the year 2000

13.1.1. Forest plot of the cross sectional incidence of adhesions in patients with chronic postoperative pain, including all studies

			Postoperative pain	Adhesions		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Bojahr 1995	0.57754011	0.03612127	187	108	31.9%	0.58 [0.51, 0.65]	-
Howard 2000	0.54	0.07048404	50	27	22.4%	0.54 [0.40, 0.68]	
Lehmann-Willenbrock 1990	0.67697595	0.02741306	291	197	34.0%	0.68 [0.62, 0.73]	-
Pitt 2008	0.30769231	0.12800774	13	4	11.7%	0.31 [0.06, 0.56]	_ -
Total (95% CI)			541	336	100.0%	0.57 [0.47, 0.67]	•
Heterogeneity: Tau² = 0.01; C Test for overall effect: Z = 10.8			= 77%				-0.5 -0.25 0 0.25 0.5 Incidence

13.1.2. Funnel plot of studies included in analysis of incidence of adhesions in patients with chronic postoperative pain



13.2.1. Forest plot of the cross sectional incidence of adhesions in patients with chronic postoperative pain, stratified by anatomical location

Study or Subgroup	Incidence	SE	Postoperative pain Tota		Moinht	Incidence IV, Random, 95% CI	Incide IV, Randoi	
13.2.1 General Surgery	incidence	3E	1014	i iotai	vveigni	iv, Kandom, 95% Ci	iv, Kandoi	m, 95% CI
Bojahr 1995 Subtotal (95% CI)	0.57754011	0.03612127	187 187		31.9% 31.9 %			+
Heterogeneity: Not applicable								
Test for overall effect: Z = 15.9	9 (P < 0.00001)						
13.2.2 Upper Gl Surgery								
Pitt 2008	0.30769231	0.12800774	13		11.7%	0.31 [0.06, 0.56]		-
Subtotal (95% CI)			13	4	11.7%	0.31 [0.06, 0.56]		
Heterogeneity: Not applicable								
Test for overall effect: Z = 2.40	(P = 0.02)							
13.2.3 Lower GI Surgery								
Lehmann-Willenbrock 1990	0.67697595	0.02741306	291		34.0%			
Subtotal (95% CI)			291	197	34.0%	0.68 [0.62, 0.73]		•
Heterogeneity: Not applicable								
Test for overall effect: Z = 24.7	0 (P < 0.00001)						
13.2.4 Gynecological Surgery	,							
Howard 2000	0.54	0.07048404	50		22.4%			
Subtotal (95% CI)			50	27	22.4%	0.54 [0.40, 0.68]		•
Heterogeneity: Not applicable								
Test for overall effect: Z = 7.66	(P < 0.00001)							
Total (95% CI)			541	336	100.0%	0.57 [0.47, 0.67]		•
Heterogeneity: Tau² = 0.01; Ch	hi² = 12.91, df =	3 (P = 0.005)	; I² = 77%			-	-0.5-0.25	0.25 0.5
Test for overall effect: Z = 10.8	5 (P < 0.00001)					-0.0-0.25 C	Incidence
Test for subgroup differences:	: Chi ² = 12.91.	df = 3 (P = 0.0)	05), I²= 76.8%					mendones

13.3.1. Cross sectional incidence of adhesions in patients with chronic postoperative pain, by surgical technique. Not applicable.

3 studies excluded. Surgical technique not specified in one. No data per subgroup of surgical technique in 2 studies. Remaining study (Pitt 2008) is performed in laparoscopy group, point estimate: 0.31 95%CI: 0.06-0.56.

13.4.1. Sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, impact of individual studies.

Study	Point estimate	95%CI
All studies included	0.57	0.47-0.67
Bojahr 1995	0.54	0.37-0.72
Howard 2000	0.58	0.45-0.70
Lehmann-Willenbrock 1990	0.52	0.41-0.64
Pitt 2008	0.61	0.53-0.70

13.5.1. Sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, stratified by quality of study

			Postoperative pain			Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
13.3.1 Low quality studies							
Lehmann-Willenbrock 1990 Subtotal (95% CI)	0.67697595	0.02741306	291 291		34.0% 34.0 %	0.68 [0.62, 0.73] 0.68 [0.62, 0.73]	
Heterogeneity: Not applicable							
Test for overall effect: Z = 24.70) (P < 0.00001)					
13.3.2 Intermediate quality stu	ıdies						
Howard 2000	0.54	0.07048404	50	27	22.4%	0.54 [0.40, 0.68]	-
Pitt 2008	0.30769231	0.12800774	13	4	11.7%	0.31 [0.06, 0.56]	
Subtotal (95% CI)			63	31	34.1%	0.45 [0.23, 0.67]	•
Heterogeneity: Tau ^z = 0.02; Chi	$i^2 = 2.53$, df = 1	$I(P = 0.11); I^2$	= 60%				
Test for overall effect: Z = 3.95 ((P < 0.0001)						
13.3.3 High quality studies							
Bojahr 1995	0.57754011	0.03612127	187	108	31.9%	0.58 [0.51, 0.65]	-
Subtotal (95% CI)			187	108	31.9%	0.58 [0.51, 0.65]	•
Heterogeneity: Not applicable							
Test for overall effect: Z = 15.99	3 (P < 0.00001)					
Total (95% CI)			541	336	100.0%	0.57 [0.47, 0.67]	•
Heterogeneity: Tau ^z = 0.01; Chi	i ^z = 12.91, df =	3 (P = 0.005)	I ² = 77%				
Test for overall effect: Z = 10.85							-0.5 -0.25 0 0.25 0.5
Test for subgroup differences:	•	•	. I² = 73.6%				Incidence

13.5.2. Table of sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, impact of quality of studies

_ F , F				
Studies	Point Estimate	95%CI		
All studies included	0.57	0.47-0.67		
Low quality studies only	0.68	0.62-0.73		
Intermediate quality studies only	0.45	0.23-0.67		
High quality studies only	0.58	0.51-0.65		

13.6.1. Sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, stratified by study design

			Postoperative pain	Adhesions		Incidence	Incidence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
13.4.1 Retrospective studies							
Bojahr 1995	0.57754011	0.03612127	187	108	31.9%	0.58 [0.51, 0.65]	-
Lehmann-Willenbrock 1990	0.67697595	0.02741306	291	197	34.0%	0.68 [0.62, 0.73]	-
Pitt 2008 Subtotal (95% CI)	0.30769231	0.12800774	13 491		11.7% 77.6 %	0.31 [0.06, 0.56] 0.58 [0.45, 0.70]	•
Heterogeneity: Tau ^z = 0.01; CI Test for overall effect: Z = 8.98		, ,	; I² = 82%				
13.4.2 Prospective studies							
Howard 2000	0.54	0.07048404	50	27	22.4%	0.54 [0.40, 0.68]	
Subtotal (95% CI)			50	27	22.4%	0.54 [0.40, 0.68]	•
Heterogeneity: Not applicable							
Test for overall effect: Z = 7.66	(P < 0.00001)						
Total (95% CI)			541	336	100.0%	0.57 [0.47, 0.67]	•
Heterogeneity: Tau ² = 0.01; Cl	ni ^z = 12.91, df =	3 (P = 0.005)	; I² = 77%				
Test for overall effect: Z = 10.8			•				-0.5 -0.25 0 0.25 0.5
Test for subgroup differences	•	•), I² = 0%				Incidence

13.6.2. Table of sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, impact of study design

Studies	Point Estimate	95% CI
All studies included	0.57	0.47-0.67
Retrospective studies only	0.58	0.45-0.70
Prospective studies only	0.54	0.40-0.68

13.7.1. Sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, stratified by publication date

		Pos	toperative pain	Adhesions		Incidence	Incid	ence
Study or Subgroup	Incidence	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Rando	m, 95% CI
13.5.1 Published before the y	/ear 2000							
Bojahr 1995	0.57754011	0.03612127	187	108	31.9%	0.58 [0.51, 0.65]		-
Lehmann-Willenbrock 1990	0.67697595	0.02741306	291	197	34.0%	0.68 [0.62, 0.73]		
Subtotal (95% CI)			478	305	65.9%	0.63 [0.53, 0.73]		●
Heterogeneity: Tau ² = 0.00; C	hi ² = 4.81, df = 1	1 (P = 0.03); $I^2 = 79$	9%					
Test for overall effect: $Z = 12.6$	69 (P < 0.00001)						
13.5.2 Published in the year 2	2000 and later							
Howard 2000	0.54	0.07048404	50	27	22.4%	0.54 [0.40, 0.68]		
Pitt 2008	0.30769231	0.12800774	13	4	11.7%	0.31 [0.06, 0.56]		
Subtotal (95% CI)			63	31	34.1%	0.45 [0.23, 0.67]		-
Heterogeneity: Tau ² = 0.02; C	hi²= 2.53, df= 1	1 (P = 0.11); P = 60)%					
Test for overall effect: $Z = 3.95$	5 (P < 0.0001)							
Total (95% CI)			541	336	100.0%	0.57 [0.47, 0.67]		•
Heterogeneity: Tau ² = 0.01; C	hi² = 12.91, df =	$= 3 (P = 0.005); I^2 =$	77%				- 1 - 1	
Test for overall effect: $Z = 10.8$	35 (P < 0.00001) '					-0.5 -0.25 (
Test for subgroup differences	: Chi²= 2.15. d	f = 1 (P = 0.14), P =	: 53.5%					Incidence

13.7.2. Table of sensitivity analysis of the cross sectional incidence of adhesions in patients with chronic postoperative pain, impact of publication date

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Studies	Point Estimate	95% CI
All studies included	0.57	0.47-0.67
Studies published before the year 2000	0.63	0.53-0.73
Studies published in the year 2000 and later	0.45	0.23-0.67